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Author:

U.S. Office of Federal Coordinator of...

Title:

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Place:

[Washington, D.C.]

Date:

[1935]

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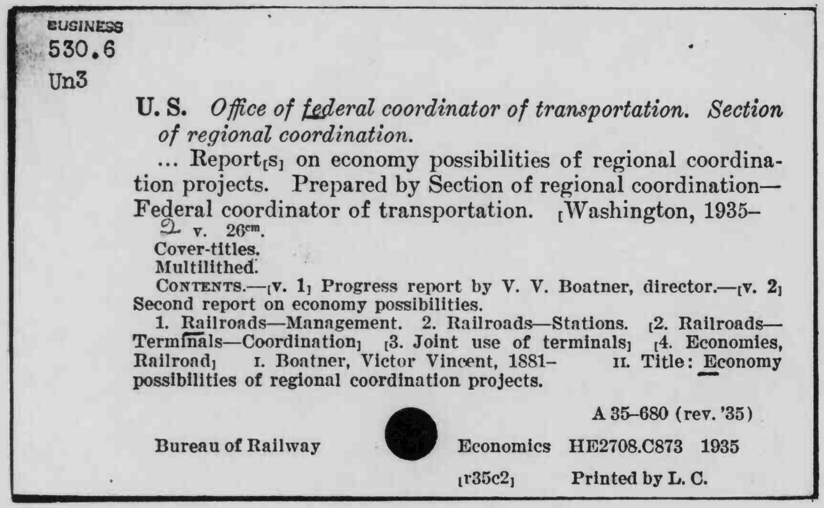

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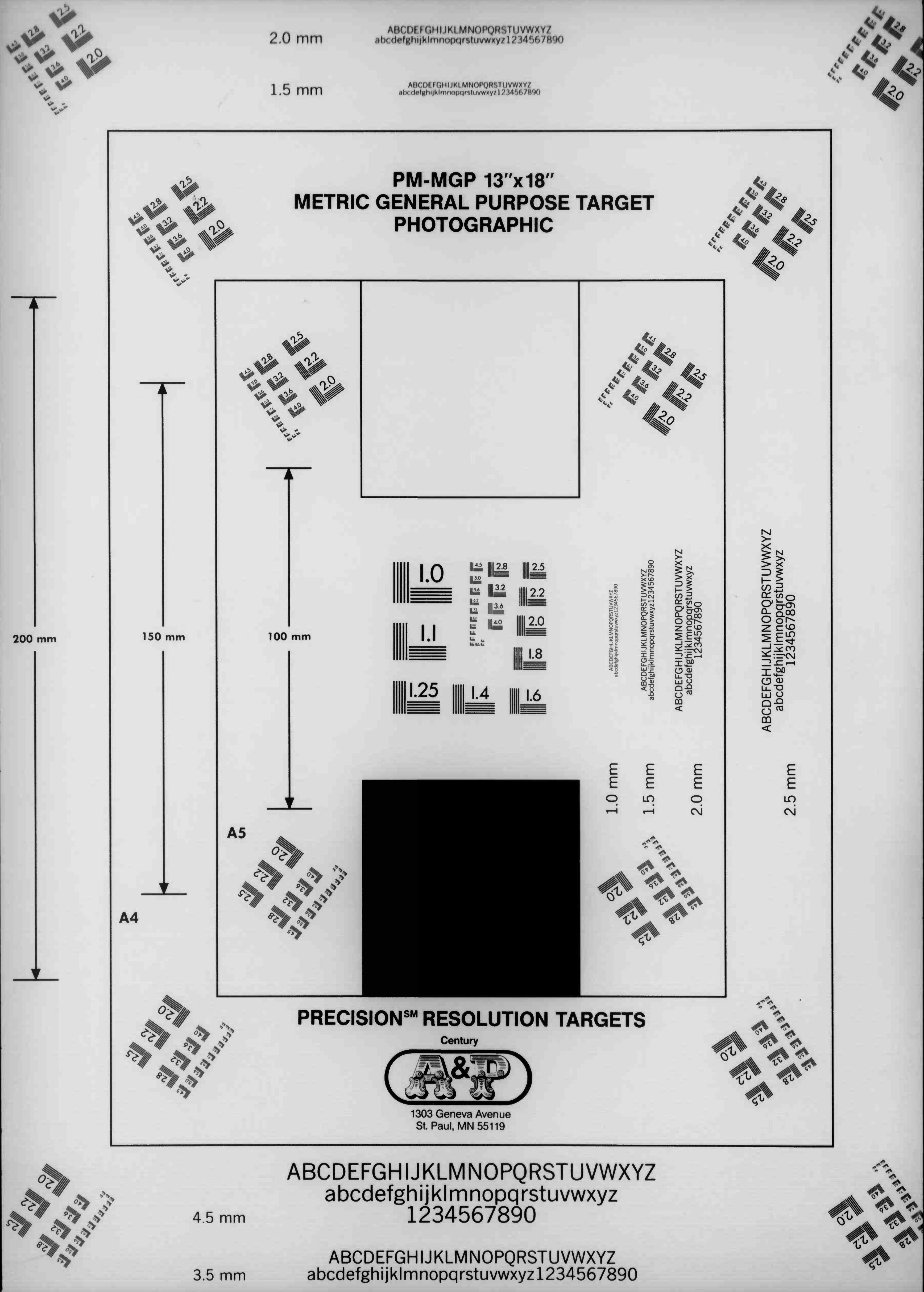

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Volume 1

U.S. FEDERAL COORDINATION OF TRANSPORTATION

REPORT ON ECONOMY POSSIBILITIES OF REGIONAL COORDINATION PROJECTS

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REPORT ON ECONOMY POSSIBILITIES
OF
REGIONAL COORDINATION PROJECTS

vol. 1

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ECONOMY POSSIBILITIES OF REGIONAL COORDINATION PROJECTS

In the search for improvements in railroad operating methods, equipment, service, and rates which would eliminate unnecessary expense or add to revenues, the Coordinator at the outset divided the work into two parts. A central staff, located at Washington, was placed in charge of the work which is not localized, but of countrywide importance. Thus, the Section of Transportation Service has been studying broadly the methods of handling merchandise traffic, passenger traffic, and freight traffic, including the methods of selling the service to the public. The Section of Purchases has been exploring standardization and reduction of the number of types of equipment and of many kinds of materials and supplies, and many phases of purchasing methods. The Section of Car Pooling has been studying plans for the pooling of jointly-used cars, and similar topics. A regional staff, however, with offices located at New York, Chicago, and Atlanta, has been studying the possible economies in operation which are localized to particular places, lines, or territories, such as terminal unification, joint use of various facilities, and the like.

This regional staff, so far as operating matters are concerned, is now in charge of V.V. Boatner, Director of Regional Coordination. In view of many inquiries as to these regional studies, a progress report by Mr. Boatner, outlining a major portion of the work, is herewith submitted.

It will appear, from a reading of this report, that much of the work has been directed to the economies in operation which are possible through the unification or joint use of facilities in terminal districts served by two or more railroads. Committees of carrier officials have been making surveys of these possibilities throughout the country, and Mr. Boatner's report indicates the nature of these surveys. The regional staff of the Coordinator has been in touch with them all, and has assumed direction of some of them. In addition to checking the reports and statistics, it has made examinations on the ground, and as a result of this supervision the reports have frequently been revised to cover additional opportunities for economies. Many of the reports have been completed, but some of the more important, notably at Chicago, are still in course of preparation.

As shown in the Boatner report, the estimates of economies in completed surveys now total something like $25,000,000, and it is believed that the final total will be as much as $50,000,000. It is also believed that this amount could be increased greatly if coordination were extended beyond the terminal districts along lines indicated in the report. The adverse affect of present costs upon charges, as in the Chicago switching district, is pointed out, as well as the possibilities of increased traffic and employment if these charges, and similar charges throughout the country, could be reduced.

The restrictions upon reduction in railroad employment, contained in Section 7 (b) of the Emergency Railroad Transportation Act, 1933, have been an obstacle in the way of carrying these terminal coordination projects into effect; but it has been evident from the beginning that there are other obstacles as well, and these are described at length in the Boatner report. If the terminal facilities were the property of a single railroad system, the coordination proposed would be a simple matter to accomplish. Instead, they are owned by separate and competing companies, and as a rule some of these companies are better entrenched in the terminal district than others and think that they have a strategic advantage in the location of their freight houses, team tracks, or industrial sidings. Notwithstanding that terminal unification would reduce aggregate expense materially, these favorably-located companies fear that the result would be loss of competitive advantage and seek compensation for such loss if it is to occur. There are also difficulties attendant upon the formation of a terminal company to conduct the unified operations, the transfer of property to it, and determination of the method of its operation.

Some railroad executives have felt that even if there were no restrictions upon reduction in employment, these other obstacles would be insuperable. They do not believe that the carriers concerned can reach a voluntary agreement, or that the Coordinator could draft an order which would sufficiently protect existing property rights and stand the test of court review.

In a communication to the Regional Coordinating Committee last July, the Coordinator brought these points to their attention:

1. There is reason to believe that these strategic advantages of location and the like are much exaggerated, particularly since the advent of the truck, whether operated independently or as an auxiliary of some other railroad. It is now difficult to bind shippers to any particular railroad except through good service and treatment.

2. To a very considerable extent these alleged strategic advantages are dependent upon statutory provisions to which the railroads have no Constitutional right and of which they can be deprived by legislation, i.e., the provisions against so-called "short-hauling." The railroads perform a public function; they were created solely for that purpose and it is their first duty. The public has the right to compel the best service which the rails can provide, whether it be single-line service or joint service by two or more lines. Individual railroads have no right to require traffic to move over their rails at the expense of the best possible service to the public. Open terminals can be legislated into existence; there is no legal difficulty in the way.

3. Even more important is the fact that individual railroads cannot under present-day conditions long prosper at the expense of the best interests of the railroad industry as a whole. It is preeminently a time for solidarity and cooperation.

4. If the best interests of the railroad industry are to be thwarted by individual railroads, the logical conclusion will follow that the number of individual railroads must be radically decreased. This can be done through a "grand plan of consolidation," like the Prince Plan or some substitute therefor, or it can be done by public ownership and operation.

The Coordinator expressed the hope that when these and other like considerations were given their due meed of thought, these competitive and strategic obstacles to unification projects which do not involve the elimination of the individual railroads would not loom as large as they have appeared to many executives. However, he asked the executives to put the matter to practical test, selecting for this purpose three large and typical terminal unification projects, one in each region, namely, at Kansas City, Indianapolis, and Birmingham. What he requested was that the railroads concerned in each one of these projects appoint responsible representatives to sit down together without delay and endeavor to work out a plan for making the proposed unification effective, just as though there were no labor restrictions and the plan could be carried into effect tomorrow.

If it should prove that the lines are unwilling to agree to any plan, he asked to be notified, without delay, what lines prevent an agreement and, definitely and specifically, why they refuse to agree. This would give him an opportunity to enter the negotiations and endeavor to bring about a settlement, and, if that should fail, to consider what order might be drafted which would compel the unification and at the same time meet any Constitutional requirements.

The purpose of this test, in short, was to determine how serious an obstacle to coordination these carrier differences and maneuverings may be, and how this obstacle can be overcome.

The carriers have been very slow in responding to this request. Kansas City has been heard from, and it appears that seven of the lines are willing to undertake the plan and four are unwilling; but the reasons for the unwillingness of the latter have not yet been made sufficiently clear. Negotiations at Indianapolis have only recently been undertaken, and at Birmingham no results have as yet been reached.

It should be understood that these test negotiations were requested merely as a means of guaging the difficulties in the way of terminal coordination projects. The Act makes it the "duty of the regional coordinating committees and the Coordinator to give reasonable notice to, and to confer with, the appropriate regional labor committee or committees upon the subject matter prior to taking action or issuing any order which will affect the interest of employees, and to afford the said labor committee or committees reasonable opportunity to present views upon said contemplated action or order." It will also be the policy of the Coordinator to see to it that the shipping interests of the community affected have an opportunity to present their views upon the project before action is taken. To date, however, the surveys of the carrier committees have not been made public, because it did not seem desirable to make them the subject of general discussion and inquiry, until the time should come when active steps for carrying the projects into effect might appear practicable.

The Coordinator is of the opinion, as the result of the studies which have been made by his staff and the carrier committees, that these terminal unification projects are physically quite practicable; that they would result in large and substantial economies to the carriers; that they need not impair service to the public but in fact would often improve service; and that in many instances, if the economies were translated into reduced switching charges, traffic might be materially increased within the terminal districts with benefit to railroad employment. In some locations, these projects would have the additional advantage of releasing valuable real estate for other use. At present the market for real estate is such that the financial benefit from this might not be immediate, but the prospective benefit would be important.

If the dismissal compensation plan for employees, recommended in the Coordinator's recent report on transportation legislation, should become law, such projects could be carried into effect with a large measure of protection to displaced employees, particularly to the older ones long in the service; and while benefit from the economies realized would be somewhat deferred, the carriers would ultimately gain such benefit in full. If business conditions should improve materially, and hence railroad traffic, the number of employees displaced would be minimized. Whether or not, however, the difficulties can be overcome which are attendant upon the unwillingness of the individual carriers to get together and cooperate still remains to be determined.

Mr. Boatner's report contains a discussion of certain other matters upon which the regional staff has been working. He shows how the economies to be obtained from terminal unification can be greatly increased by extending the coordination beyond the terminal district into line-haul operations, and gives various specific illustrations of such possibilities in connection with both less-than-carload and carload freight traffic. He discusses the possibilities in the way of economies through the abandonment of unprofitable branch lines and through joint operations and the abandonment of unnecessary trackage in the case of paralleling lines of low traffic density, and shows the obstacles and difficulties which attend such projects. He outlines the very extensive investigation which is under way, at his instigation, of possibilities of economy through coordination of back shops and general repair plants for locomotives and cars. Finally, he discusses the waste which he believes to be involved in the maintenance of many uptown ticket offices and the steps which could be taken by the carriers to decrease this waste.

It should be understood that this progress report is not intended to cover fully the work of the Coordinator's regional staff. It is working also on other projects which will later be discussed and explained.

Joseph B. Eastman

Federal Coordinator of Transportation.

February 14, 1935

PROGRESS REPORT OF V.V. BOATNER, DIRECTOR OF REGIONAL COORDINATION

At the close of 1933 the Regional Directors made to the Coordinator a report of projects that were being surveyed and analyzed by the carriers with a view to learning whether under fully coordinated arrangements economies and efficient service could be obtained. This report indicated that many surveys had just been started and that many others had not yet been undertaken. Thereafter arrangements were made to correlate and expedite the regional surveys in cooperation with the regional coordinating committees. To date 4,755 individual projects have been studied.

TERMINAL UNIFICATION

From the beginning it was evident that terminal activities would offer a fruitful field for explorations. In fact joint use of terminals and trackage incident thereto was named as a specific purpose of the Emergency Railroad Transportation Act, 1933. Not only have the larger rail centers been analyzed but the smaller common points have also received attention. At larger centers, the facilities and forces now employed have been itemized for consideration; yard engine records have been run showing individual movements of cars from and to the various terminal points, with the purposes of such moves. This has revealed what is actually taking place. The data have been concentrated and analyzed by carrier representatives of long practical experience. Further analyses have been made by men with similar experience representing the Coordinator.

Physical, municipal and other features have contributed problems peculiar to every point. This has required individual treatment of each project to obtain an approximation of the practical possibilities.

As outlined in the previous reports, the arrangement under which we are functioning was new, and the surveys had to be carried on generally by committees of carrier officers with regular duty assignments. Under such conditions the work has been slow, but considering the magnitude of the undertaking not unduly so. In the beginning the psychology of the railroad committees and their subcommittees was such as to cause them to view the undertaking from the standpoint of protecting individual interests at common points. Until this condition could in a measure be overcome, thorough approach to the economic possibilities of full coordination could not be obtained. It had the result that many surveys reflected only a portion of the economies possible under completely coordinated arrangements. Such surveys had to be reworked and revised along broader lines.

At large terminals your organization early reached the conclusion that all activities within a terminal switching district were susceptible of coordination, and in the process that they should be organized as a unit in order to function with the greatest efficiency and without discrimination. This course was also considered necessary to prevent any line from operating individually in the terminal area, thus tending to disrupt a completely united arrangement for serving the public. Such an arrangement must necessarily exist to insure maximum economy and efficiency and to prevent any lines from enjoying full terminal advantages at lower expense than the lines in the terminal unit, which they might otherwise do by availing themselves of the low reciprocal switching charges, maintained to expedite the easy flow of traffic within the terminal area, but which do not reflect the full cost of service.

The studies have been made on the basis of handling traffic generally under present line-haul arrangements. The possibilities of added economies through pooling operations beyond the terminal areas are in general being surveyed by other sections of the organization. Such possibilities appear great and will be discussed later in this report.

Estimated Economies. Estimates of economies possible of accomplishment through terminal unification, as reported thus far by the carrier committees and further amplified in some instances by your organization, total about $25,000,000. Your organization is of the opinion that when all the surveys have been completed this amount will be increased to as much as $50,000,000. As hereinafter pointed out, this amount could be further increased greatly by extending coordination beyond the terminal districts. The surveys are being checked in detail by your regional staff. They have gone on the ground and have reviewed the possibilities from a physical and practical point of view. They have also made comparisons with other places where similar facilities have been coordinated and actual economies effected. In some instances their analyses have increased the estimate of economies.

The Chicago Situation. The economies in these terminal unifications will be obtained by lessening the units of service employed and the numbers of movements required. At a terminal such as Chicago or St. Louis, where many lines enter the switching district, each has a train yard for receiving and dispatching trains. Each of the 22 Chicago lines has at least one principal yard which might be termed an outlying yard. Including, however, yards used for primary purposes, there are at least 50 major yards in the Chicago Switching District. These yards are usually some distance from the downtown business district. To reach the district, the line projects itself over its own or leased mileage, and in the district establishes its own freight houses, team tracks, warehouses, grain elevators, etc., where it receives and dispatches traffic. The cars are switched in the outlying yard and each line completes with switch engines the service to the downtown area. In addition to its cars for the downtown area, a road also brings in cars for delivery to other lines, the usual practice being either to deliver them direct where a connection exists or through use of intermediary belt lines which connect with all lines. There are five major interchange belt lines at Chicago and eleven minor ones. At St. Louis, there is one major belt and four minor ones. All these belts are differently owned and all secure routing either through their own efforts or the activities of their owners. With the five major belts at Chicago there are five major streams of traffic flowing from one railroad to another, and frequently the minor belts come into play.

Into the Chicago train yards move livestock for the stockyards, produce for the produce terminals, potatoes for the potato mart, etc. Upon arrival, these cars are promptly switched and started on their run to the various downtown destinations. This is repeated many times during the day as the traffic arrives, and based on a two-day check test, results in a daily operation from the train yards to the stockyards district alone of 239 separate trains or switching cuts and corresponding moves from the stockyards district to the train yards. These trains or yard cuts consist of from 1 to 35 or 40 cars. More or less similar movements take place to and from the produce terminals, potato mart, and the many downtown freight houses, team tracks, elevators, etc. Our check indicated for the two-day test period that even the through traffic via the Chicago gateway, instead of all passing over switching lines around the city, was, to the extent of about 40 percent, taken into the downtown area over the various lines and then moved back through the different switching lines to the outer belts, where it was delivered to the outbound lines.

In interchange of traffic between lines the general practice is for each line to deliver its cars to the yards or facilities of the other. This causes a light movement of the engine in one direction. Such movements range in distance from a few blocks to several miles. Many arrangements have been worked out for one engine to carry the load in both directions, under what are termed reciprocal car pulls. This practice has been somewhat extended during the depression period, but the preponderance of traffic is still handled throughout the country with each line delivering cars to the others' facilities, its engines moving light in return.

This general character of operation results in a flow of traffic, sometimes of one or two cars with an engine, moving through the terminal area in such multiplicity as to attract attention of even the casual observer, and with much apparent waste involved in individuality, intricacy, and complexity of operation. This same duplication of service exists in lesser degree at other terminals and continues all the way down the line to the smaller stations, where not infrequently two switch engines of two lines may switch one plant, one engine being sufficient for the service.

At Chicago, the cost of terminal operation in 1929 was, roundly, $120,000,000. In 1933 it was, roundly, $60,000,000. This does not include taxes and interest. The volume of traffic in this period declined about the same percentage as the expense.

The Chicago Switching District extends from Wolf Lake on the south to Bensenville on the north, a distance of some 45 miles. In this area, and including the Elgin, Joliet & Eastern, there are about 6,000 miles of track. As indicated by the two-day test check, the switch engine shifts operated daily averaged 975, handling approximately 22,000 cars, of which 8,800 were empty, and 13,200 loaded. 7,235 loaded and 3,888 empty cars were brought into the district daily and 6,325 loaded and 4,890 empty cars moved out of it daily.

Records of these cars run for the test period indicate their time of arrival and their course through the city until disposed of, and conversely the time they originated in the terminal to the time they moved from it. The record of through cars indicates time of arrival, routes followed, and time of departure. This information is graphed on flow charts, indicating in minute detail how the traffic flows within the area. After reduction to this form and with arrival and departure of trains available, a terminal committee has from the information so gathered undertaken to reduce to a minimum the number of yards necessary to handle the business. The men performing this task are of long experience in handling traffic at Chicago and elsewhere. At Chicago they have reduced the 22 outlying yards to 6, all located near the major belts. Considerable transfer movement will take place within these yards, avoiding present movement of traffic by yard engines to the yards of other lines, since under the proposed arrangement many trains of different roads by different routes will arrive in one yard. Then, for example, livestock for the stockyards will move in one train for all roads using the yard, instead of in separate trains of each road with few cars in each train. The number of inbound and outbound freight houses will likewise be reduced with corresponding reduction in movements. Cars to team tracks, produce terminals and the like will move in combined units. A reduction will be made in engine houses, car repair and other mechanical facilities. Circuitous, costly and conflicting interchange movements, such as are illustrated by the following exhibits, taken from the evidence in the Chicago Switching Case in 1931, will be avoided. These movements were said to have resulted from shippers' routing. The exhibits speak for themselves and need no comment as to the possibilities of economy through a substituted coordinated interchange utilizing the most direct advantageous interchange routes, and are set forth on pages 6 and 7 hereof.

The St. Louis Situation. This method of procedure at Chicago, which is being followed in the report now under preparation, has been followed generally at other points. Chicago is used as an illustration only because it is the largest freight terminal in the country. Chicago with its topography does not present the same physical difficulties in concentrating traffic flow as are encountered at locations like St. Louis, where 12 lines enter from the east through different sections, each projecting itself into a small yard along the river bank capable of accommodating no more than the normal flow of its business. There, as elsewhere, each line constructed its facilities to meet individual requirements and with no view to giving access or benefit to its neighboring competitors. Incident to the heavier volume of traffic in the past, some of the St. Louis lines built larger facilities farther out. By utilizing some of these facilities, the number of yards has been reduced in the St. Louis survey from 50 general to 9 primary yards with no major capital expenditures. Some of the general yards will continue as secondary units. We are of the opinion that a further reduction of 1 or possibly 2 primary yards with additional economy is possible.

SWITCHING SERVICE AND COST ON GASOLINE
FROM STANDARD OIL CO. TO SHERWIN WILLIAMS CO.
VIA B. O. C. T. - BELT AND PULLMAN

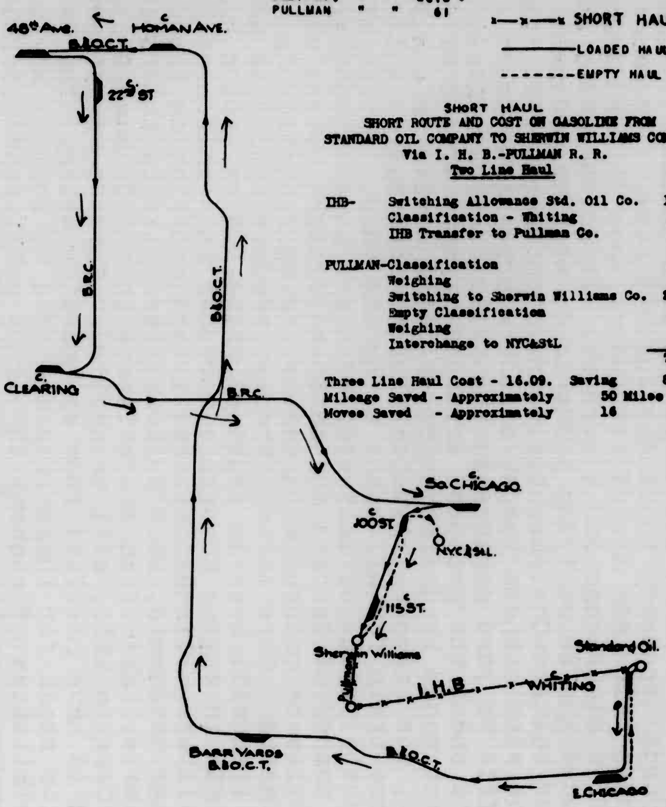
ELEMENTS OF SERVICE

	No.	Description	Cost Per Car
	B. O. C. T.		
Empty	113	Transfer East Chicago to Whiting	$ .23
	18	Classification at Whiting	.33
	303	Transfer Whiting to Standard Oil	.12
Loaded	656	Switching allowance at Standard Oil Co.	1.75
	18	Classification at Whiting	.33
	41	Transfer Whiting to Barr Yard	.39
	43	Transfer Barr Yard to Homan Ave.	.61
	177	Transfer Homan Ave. to 48th Ave.	.41
	330	Transfer 48th Ave. to 46th Ave.	.17
	375	Interchange to Belt Ry.	.37
	Belt		
	23	Classification at 22nd St.	.38
	43	Transfer 22nd St. to Clearing	.64
	4	Classification at East Bound Hump Clearing	.39
	7	East Yard Pull Down Clearing	.55
	42	Transfer Clearing to So. Chicago	.69
	21	Classification So. Chicago	.48
	73	Transfer So. Chicago to Pullman Jct.	.48
	106	Interchange to Pullman R. R.	1.35
	Pullman		
	1	Classification at 100th St.	.47
	29	Weighing at 100th St.	.52
	5	Transfer 100th St. to 115th St.	.31
	2	Classification at 115th St.	.42
	39	Switching at Sherwin Williams Co.	2.72
Empty	2	Classification at 115th St.	.42
	5	Transfer 115th St. to 100th St.	.31
	29	Weighing at 100th St.	.52
	1	Classification at 100th St.	.47
	7	Interchange N. Y. C. & L.	.26
		Total	$16.09

PAGE NO. 19

THREE LINE HAUL
B&OCT ROUTE NO. 709
BELT RY. " " 2013 ✓
PULLMAN " " 61

x—x—x SHORT HAUL
———— LOADED HAUL
-------- EMPTY HAUL



SHORT HAUL
SHORT ROUTE AND COST ON GASOLINE FROM
STANDARD OIL COMPANY TO SHERWIN WILLIAMS COMPANY
Via I. H. B.-PULLMAN R. R.
Two Line Haul

IHB-	Switching Allowance Std. Oil Co.	1.75
	Classification - Whiting	.33
	IHB Transfer to Pullman Co.	.39
PULLMAN-	Classification	.47
	Weighing	.52
	Switching to Sherwin Williams Co.	2.72
	Empty Classification	.42
	Weighing	.52
	Interchange to NYC&StL	.26
		7.38

Three Line Haul Cost - 16.09. Saving 8.71
Mileage Saved - Approximately 50 Miles
Moves Saved - Approximately 16

SWITCHING SERVICE AND COST ON IRON AND STEEL
FROM GRIFFIN WHEEL CO. TO GENERAL AMERICAN TANK CAR CO.
VIA PULLMAN - BELT & B. O. C. T. IN N. Y. C. & ST. L. CARS

ELEMENTS OF SERVICE

	No.	Description	Cost Per Car
	Pullman		
Loaded	33	Switching at Griffin Wheel Co.	$5.39
	30	Weighing at Griffin Wheel Co.	.39
	14	Transfer Griffin Wheel Co. to 115th St.	.46
	2	Classification at 115th St.	.42
	5	Transfer 115th St. to 100th St.	.31
	1	Classification at 100th St.	.47
	20	Interchange Belt	1.18
	Belt		
	21	Classification at So. Chicago	.49
	78	Transfer So. Chicago to 22nd St.	.67
	23	Classification at 22nd St.	.38
	84	Interchange to B. O. C. T.	.98
	B.O.C.T.		
	20	Classification at 48th Ave. Yd.	.51
	333	Transfer 48th Ave. to Homan Ave.	.34
	8	Classification at Homan Ave. Yd.	.56
	188	Transfer Homan Ave. to Barr Yd.	.50
	31	Transfer Barr Yd. to East Chicago Yd.	.47
	7	Classification at East Chicago Yd.	.44
	109	Transfer East Chicago Yd. to General American	2.50
	515	Switching at General American Tank Car Co.	1.61
Empty	126	Transfer General American to East Chicago	.62
	7	Classification at East Chicago Yd.	.44
	111	Transfer East Chicago Yd. to Burnham	.68
	406	Interchange at Burnham	.40
		Total	$20.21

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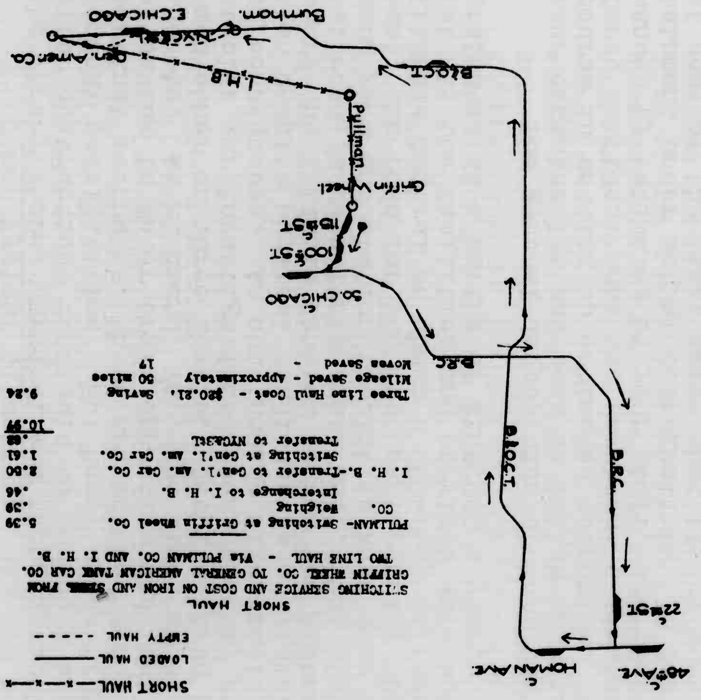
THREE LINE HAUL
PULLMAN RR ROUTE NO. 25
BELT RY. " " 2170
B&OCT " " 695-A

SHORT HAUL —x—x—x
LOADED HAUL ————
EMPTY HAUL -----



SHORT HAUL
SWITCHING SERVICE AND COST ON IRON AND STEEL FROM
GRIFFIN WHEEL CO. TO GENERAL AMERICAN TANK CAR CO.
TWO LINE HAUL - Via PULLMAN CO. AND I. H. B.

PULLMAN- CO.	Switching at Griffin Wheel Co.	5.39
	Weighing	.39
	Interchange to I. H. B.	.46
I. H. B.-	Transfer to Gen'l. Am. Car Co.	2.50
	Switching at Gen'l. Am. Car Co.	1.61
	Transfer to NYC&StL	.62
		10.97

Three Line Haul Cost - $20.21. Saving 9.24
Mileage Saved - Approximately 50 miles
Moves Saved - 17

FILMED AS BOUND

Other Typical Situations. At New York and on the Jersey shore, physical and topographical conditions offer obstructions difficult to surmount and reduce the economy possibilities. But here, aside from the yard and terminal economies, there are offered wide opportunities of saving in water craft operation and facilities incident thereto. At Richmond, Va., the lines cross over and under each other on three levels. Despite these physical obstacles our investigations reveal economy possibilities of consequence. An outstanding illustration of coordination despite physical handicaps is at Vicksburg, Miss., where the Illinois Central leased the Alabama & Vicksburg Railroad, a relatively small unit. The Alabama and Vicksburg yard and station facilities were some two miles distant, the road for the most part running obliquely to the Illinois Central on about a 200-foot difference in grades. Yet all the facilities and services were actually coordinated at a saving of $126,000 a year.

The general disposition of both the carriers and your organization has been to follow an ultra-conservative course in setting up estimated economies. We are, therefore, confident that the carriers' estimates, further enhanced by estimates of your staff, are practical of attainment under actual coordination. In fact, executives of some of the lines agree that if the complete unit plan of operation is followed, most of the estimates are quite conservative. In addition it is generally apparent that in the event of actual operation many of the practices now in effect and upon which the calculations are based would either be eliminated or materially revised, adding further to the economies set forth. It is indicated that a great measure of these economies will be through elimination of existing duplicate services and facilities.

Carrier Objections. After completion of the surveys by the field committees, the policy has been to refer them to the individual lines for the opinion and concurrence, or otherwise, of the operating officers. The instances are few in which exceptions are not taken to the broad bases upon which the studies have been made. Each line is, of course, averse to going along with a coordinated terminal arrangement without the assurance of a proper and compensatory adjustment for use of its property and facilities. Further, the lines that are intrenched favorably in industrial areas where they feel they enjoy major traffic advantages evince a disposition against any relinquishment of their preferential positions. No estimate of the value of such advantages has been set up in any case. Such value is intangible and speculative and in our opinion its magnitude has been exaggerated. Nevertheless, the strategic location of a railroad in a large industrial area, where it serves the major part of that area, has an intrinsic value. Whatever this value is, however, it has greatly diminished with the extension of the motor vehicle as a facility for the completion of service.

The carriers are reluctant to enter enthusiastically into pooling activities with competing lines in a terminal area. This is natural and we think there is considerable justification for such reluctance, in the light of present practices and methods of operation. They view, with commendable pride, adequate and efficient facilities built up over a long period of time, and more strategically located for traffic and operations than those of some competitor. However, it is necessary to carry on terminal operations in a unified and completely coordinated manner if maximum operating economies are to be effected and demands for capital outlays avoided. Under current methods, the railroads are rendering a service of the highest quality in their history. Competition between roads is so keen that special runs are frequently made with one car, whether or not necessary or demanded by the shipper. Some carrier representatives seem to feel that a coordinated arrangement will in a measure nullify this service and are averse to coordination or unification of facilities on that account. Necessarily, under a coordinated arrangement which would undertake to render a reasonable, efficient and common service for all, much of the expense of these special runs which serve no particular need would be eliminated. To some extent, the shipping public, through its traffic organizations, is jealous of any intrusion into this field that might appear to reduce the special service which it now enjoys. Our opinion is that these fears are unwarranted. Industry can and will be properly served under coordinated arrangements and, on the whole, the flow of traffic will be expedited. Our conclusions in this respect are concurred in by the heads of some large industries and by industrial traffic managers with whom we have conferred.

Another major factor that must be overcome to coordinate a terminal and operate it as a unit is the individual ownership of property and facilities. This is a complicated problem. Many of the major terminals have one or more separately incorporated switching lines. There would be no difficulty, so far as the securities of these lines are concerned, in blending them into a terminal operation,- the interest on such securities would be a part of the terminal expense. But the trunk lines reaching into the terminals have property and securities that cover areas extending beyond the terminals proper. The course we suggest to overcome this difficulty is the formation of an operating company which, under contract, would lease all facilities on a nominal rental basis over a stated period of time, leaving the securities of the roads in their present position: That switching charges be provided, based upon the present charges, to be absorbed out of line-haul rates; that joint facility charges be projected on basis of costs of each line, determined by the average of such costs over a fair test period. With revenues provided in this manner, and operating costs reduced to the extent estimated, the profits from operation would be the amount saved through coordination. The terminal operating company could assume interest upon the securities representing the property wholly confined to the terminal area and could reimburse participating lines by distribution of the remaining, or net, profit realized from the effected economies. A committee of five railroad legal officers is collaborating with your Director in an endeavor to work out a practical arrangement along this line.

Many executives take exception to the possibility of economy under joint and concentrated operation, claiming they can operate separately more economically. This would not be true if the opportunity to avail themselves of the reciprocal, and in most cases unremunerative, switching charges were withheld from lines that come to the edge of the terminal where they assume only train yard expense, then take advantage of the low switching rates and thereby participate in traffic to and from the entire area. These reciprocal arrangements should be abandoned under coordinated terminal operation. Any line not participating in a coordinated terminal should have no such rates available. Instead, it should be required to operate upon the basis of paying a division to the terminal out of the line-haul rate. Such division should be sufficient to defray the cost of service and produce a reasonable profit for the terminal on the traffic so handled.

There is much opposition to the relinquishment of individuality within a terminal area. Each line is reluctant to allow an intermediary terminal company to enter upon its property and to have access to its patrons such as a coordinated terminal would require. Managements feel that their interests would be seriously impaired if this were done. Unquestionably, such an intermediary would eliminate some of the personal contact which the lines have with their shippers - at least as such contact exists under present conditions. The value of this contact, however, is open to question and it would not be wholly eliminated. The individual line would continue to seek traffic through service agents and solicitors, and in many instances a more satisfactory service to the patrons would result than is possible now. Many lines frequently do not now enjoy the business from industries on their rails against aggressive solicitation of their competitors. In some instances, the loss is accentuated by minor irregularities in their switching service.

Generally speaking, the importance of such objections disappears where coordination or unification is actually effected, as has been demonstrated over a long period of years in jointly-owned terminals and union passenger stations throughout the country, which are universally recognized as economical methods of carrying on terminal operations. At Kansas City, objections have been offered by some of the carriers to the coordination of that terminal, as proposed in the survey made under direction of your forces, and the traffic feature is a material factor in the objections. However, all lines at Kansas City jointly own and operate a terminal railroad which serves a large industrial area. There seems to be no record of any line being able to show that it does not enjoy its fair share of the traffic originating and terminating on this property under the joint method of operation. The lines seem to be willing and able under this arrangement to solicit and participate in traffic to and from this property on a basis of equality, the operation and service being left entirely to the terminal company. Therefore, it would logically appear that if the activities of such a terminal property, owned by all the carriers, were spread over the entire switching area, as the report proposes, the same relative traffic conditions would prevail throughout the entire area as now prevail throughout the restricted area served by the terminal company.

This same principle seems to be demonstrated at Chicago, St. Louis, Peoria and at other terminals throughout the country where jointly-owned but individually-operated terminal railroads are employed. The Nickel Plate Railroad is a clear illustration of a line operating without the advantage of extensive terminal facilities of its own. Yet its record of earnings from the traffic it enjoys reflects a more wholesome condition in some respects than is found upon many lines burdened with major terminal activities, the expense of which materially affects their net earnings. Insurance companies doing a gross business much greater than the railroads offer standard policies with substantially the same rates. They seem to have no difficulty through service agents and solicitors in securing business for themselves.

Nearly all terminals are equipped with an overabundance of facilities of every character - more than may ever be required, especially with the greater expedition and simplicity of movement which we are seeking to provide under coordinated arrangements. When most traffic was handled by the rail carriers, a large intra-terminal or cross-town switching was performed, and frequently serious congestion existed. In some measure, this was induced by the shipper specifying the routing. At a number of terminals such congestion was serious and costly. It was the cause of dissatisfaction and complaint from the shippers. It caused abnormal expansion of some lines and also brought into being, in order to obtain proper service, the so-called industrial switching roads, which handle the traffic of industries by which they are owned or leased, and which often become full-fledged common carriers, soliciting the routing of all kinds of freight from all sections. The influence which the industries are able to exert from their traffic frequently enables the industrial road to affect materially the advantageous flow of traffic, causing further complications and expense in terminal operations. In the projection of a coordinated arrangement, these industrial lines would be included as a part of the system and utilized in the manner best suited to the needs of the system. Some such lines are vigorous, well-operated, and render constructive service. At the same time, their multiple activities clutter up the terminals and add materially to the expense of operation. The facilities of these carriers should be taken in to the coordinated terminal in the same manner and upon the same general terms as the facilities of other lines utilized.

Terminal operations are a most costly phase of railroad performance. Practical men have estimated that 40 percent of the transportation expense of the carriers is involved in their terminals. The information obtained in a questionnaire of your Director of the Section of Transportation Service reflects from the records of the carriers that actually as high as 53.67 percent of the cost of transport is represented in terminal cost. It is to be understood that this terminal expense includes the cost of intermediate yardings and interchanges as well as the cost at origin and destination terminals. It is, therefore, imperative that ways and means be found to bring about a lessening of this cost, so that the carriers may avoid depletion of their revenues and make rates and render service that will not only retain present traffic but regain some of that which has sought cheaper avenues of transport.

Effect of Present Waste on Rates. The present rates of the carriers are not too high when based upon present costs of operation, as is evidenced by the meager net operating revenues derived, and the return which they produce is far below what is considered a fair return upon the investment; in fact, upon some lines there is no return at all. An application for general rate increases is now being given consideration by the Interstate Commerce Commission. It includes increases in switching or terminal rates. These rates were advanced in Chicago in 1931 and the order was subsequently sustained by the Supreme Court. Since the advance, the volume of switched traffic has greatly declined at Chicago. The entire figures are not available, but testimony and exhibits presented at recent hearings before Commissioner **Aitchison** on the further proposed advance of these rates indicate a startling diversion, one concern presenting figures of a diversion of approximately 9,200 cars in 1934, all of which moved by rail prior to 1931. Coal reaching Chicago by water has gone largely to the trucks instead of rail, and the sand and gravel movement has practically disappeared. Of the 235,000 tons of sand, gravel and crushed stone, representing, at 50 tons, 4,700 railroad cars of traffic, used in construction of the new twenty-million dollar Post Office at Chicago, we are informed by the private contractor that all moved by water and truck. 2200 tons of steel were trucked in from the South Chicago steel district, and the ornamental iron moved in by truck from the Twin Cities. The structure for which these trucked commodities were used is built over the railroad tracks leading into the Chicago Union Station.

The grain trade claims inability to merchandise locally under present terminal rates, and diverts grain to other centers to avoid paying more than line-haul rates. The largest single user of corn in industry follows this practice.

Obviously, with their present costs, the rails cannot make lower rates and come out whole. The high transportation costs tend to force activities to other areas, where costs, not only by rail but also by water and truck, are cheaper. The traffic diversions constantly tend toward increased costs and higher rates on the remaining traffic. This affects the employes of the roads just as seriously as the roads themselves. Elimination of waste and duplication that can be brought about at Chicago would make it practicable to restore and retain with a profit from its handling a substantial portion of this intra-terminal traffic, affording much additional employment and relieving the city streets from the congestion, danger and expense incident to present movements by truck. What applies at Chicago is true in diminishing proportions throughout the country.

Economies in Operations beyond Terminal Areas. Beyond the amplification we have made of the estimates of carriers' committees, there are further large economies to be had in both terminals and in line haul by changing methods of handling certain traffics to and from terminal areas. This will produce economies by reducing the number of fast competive trains operated.

To illustrate specifically how this could be accomplished with a coordinated terminal, using Chicago as an example: At the numerous Chicago freight houses, there is now a daily house setting of 1,450 cars for outbound loading of less-than-carload shipments of merchandise. The average load for each car forwarded is 4.7 tons per car, yielding an average, according to the l.c.l. study of the Section of Transportation Service, of $16.61 revenue per ton, or $67.10 per car. These cars move for short distances, such as to Cedar Rapids, St. Louis, etc., and for long distances, including Pacific Coast, Texas, and Florida points. Under coordination, such cars would be loaded at some 6 freight houses serving all lines and move to a coordinated station serving all lines. The coordination of movement of the traffic naturally following would be to load all the freight from Chicago to Cedar Rapids, for example, in one car, or to load the cars to cubical capacity, averaging about 12 tons per car of package shipments, one car thus serving where three were used before, the traffic of all four Cedar Rapids lines to be handled in such manner. With this arrangement to all common points, the number of cars utilized would be reduced from 1,450 to 800 per day, or some 650 cars. There would not be a straight two-thirds reduction, owing to the continued necessity for loading cars to non-common points, preventing consolidation of their contents.

The same practice could be pursued on inbound traffic now requiring an average of 870 cars. This number could be reduced to 500 cars, thus eliminating inbound and outbound some 1,020 cars daily from the Chicago terminal. When it is considered that under the highly efficient operation superinduced by economic necessity it costs $12.15 for every loaded car handled in Chicago, the elimination of those 1,020 unnecessary cars would effect a saving of, roundly, $3,800,000 per annum in addition to the amount estimated as possible by coordinating services and facilities within the area. A corresponding reduction in switching expense would ensue at Cedar Rapids and at all other joint or coordinated terminal points throughout the country receiving the cars. The same would apply in like degree to all coordinated terminals that load package freight cars. The average tonnage per car is about 3.6 tons throughout the country. The car loadings reflect 600,000 cars loaded per week in the United States. 26 percent of these, or approximately 160,000 cars, are merchandise cars. If coordination of movement and facilities is applied on package freight, such as illustrated by the Chicago-Cedar Rapids example, it is estimated that approximately one-third, or 53,500, of these merchandise cars can be eliminated from the weekly loadings, a total of some 2,782,500 cars yearly. At a most conservative rate of $4.00 per car average cost at each terminal, a saving of $23,250,000 per year in terminal expense alone would result from this source.

In like manner, the movement of high speed carload freight is susceptible of being controlled to a considerable extent in its flow into and out of terminals. For illustration, 4 roads operate merchandise trains leaving St. Louis each evening with limited lading, for merchandise and perishable traffic in such trains averaging from 5 to 25 cars per train, or some 60 cars daily. Under a coordinated terminal arrangement at Chicago, these trains would arrive in the 2 yards to which the inbound carriers are assigned and the business moved to the down-town distributing area with 2 switch engines instead of with 4 as at present. However, under line-haul coordination, this high class business could be assembled in one yard at St. Louis and operated in one train to Chicago, where, with the abundance of facilities existing, this one train could be run to the downtown district, entirely eliminating the switching transfer movements. In other words, strict terminal coordination would reduce the transfer movements from four to two, while the addition of line-haul coordination would reduce the movements from two to none. Some few cars in the train would be for other areas, but would be handled by one engine to such areas instead of by four as at present. With extension of the practice to Kansas City, St. Louis, Twin Cities, Cincinnati, Indianapolis, Birmingham, Omaha, Denver, and other major points, economies of substantial proportions would occur.

Road economies incident to such coordinated operation would be of major consequence, similar to the less-than-carload economies reflected in the report, but to a greater degree. However, they are not so easily estimated until your carload study revealing cars and movements of this character is available. Such figures should further amplify the opportunities. Obviously the loading of the three trains on the three lines not handling the coordinated train could be materially increased, time not being a controlling factor for the additional loading available. All present trains might not be operated regularly over some of the lines. Important freight at intermediate points could be moved by pick-up trains operating over only a portion of the route. It was estimated by one of the western roads that through a joint handling arrangement of livestock and meat from Council Bluffs and Sioux City to Chicago by the three major lines involved, a line-haul saving would result to this one road of $300,000 a year. At the same time, its business would continue to be identified as its own. This is merely illustrative of the principle that it is entirely practicable to pool the operation without pooling the traffic, preserving the individuality of each line, thereby securing maximum economies. The joint or coordinated facility would load all the freight practicable in each car and each line's billing and revenues would go with each shipment, delivery being effected, for example, at Cedar Rapids, by the coordinated agency for each of the four lines on the billing and expense bills of each line, settlement for transport to be made on an equitable basis between the lines.

The costs can also be equalized by alternating movements over the various lines, if requirements can be met. On carload traffic such as outlined between Chicago and St. Louis, it is suggested the movement be on a car-mile basis, at an agreed rate per mile for loaded and empty cars. Tentatively suggested are 7 cents per loaded car-mile, and 4 cents per empty car-mile, the same to be reciprocal and upon a basis somewhat similar to the present per diem arrangement used in handling freight cars, equalization taking place currently by alternating car movements between lines as business conditions justify and settlement to be made between lines for credits and debits monthly or quarterly. Such an arrangement makes for full economy, yet leaves each line free to solicit for its own account and to enjoy the revenues accruing from the movements. The public is free to favor any line desired, the line so favored assuming full responsibility to the shipper to render satisfactory and efficient service.

The Merchandise Traffic Report of the Section of Transportation Service outlined a plan for handling package freight which the carriers are now considering. We do not question the economies set up in the report or the methods of handling proposed. We only undertake to demonstrate what can be done in the way of terminal economy at each end by reducing freight houses and switching expense. The pooling of traffic, particularly l.c.l. traffic, has been explored by your Section of Transportation Service and the carload traffic is being given like exploration. However, pending conclusions thereon, we here discuss only economies in terminal and line operation attainable under coordination without affecting individual rights of interested lines.

Obviously under a completely coordinated arrangement the methods for future operation projected in many reports would be considerably changed and in our opinion economies enhanced from 10 to 50 percent over the amounts determined by the surveys. This conclusion is reached as a result of comparison with what the carriers have actually effected through unification either on their own lines or jointly with other carriers. It is also demonstrated in the application made sometime ago by the three Hill Lines in the northwest area to the Commission for consideration. It was set forth in this application that merging the three lines would effect economies of ten million dollars a year. This estimate was based upon an elaborate survey. Under the recent coordination survey carried on by carrier committees and embracing all lines in the northwest from the head-of-the-lakes and Twin Cities to the Pacific Coast a saving was set forth of $3,600,000. To this can be added $1,500,000 representing concentration of backshop work, making the total $5,100,000. This demonstrates that the coordination studies have been definitely confined to local points without consideration of the joint use of main tracks beyond the terminal areas or consideration of the control of the traffic flow into the terminal by cooperative effort. At Toledo, Ohio, the carriers reported a possibility of $13,000 saving through coordination, while the recent merger of the Michigan Central and New York Central operations at Toledo resulted in a claimed saving between these two lines alone of $750,000. With the remaining seven lines operating independently and making independent interchanges plus the combined New York Central operation, or a total of eight separate yards, complete coordination in our opinion should produce even greater economy than that secured by the New York Central.

At Duluth-Superior, Minn., the carriers' committee expanded the estimate of roundly $385,000 saving in terminal coordination to, roundly, $700,000, through taking into consideration the cooperative handling of traffic beyond and into the terminal area. In the Rocky-Mountain Division of the Western Region, we requested the carriers to consider coordination of facilities and operations of lines from Helper, Utah, through Salt Lake City and Ogden, including all activities within proper range in the vicinity of Salt Lake City. Without definite survey, the carriers reported no economies were practical. In the opinion of your staff, the coordination of these operations represents a potential economy of approximately $750,000 a year. At Milwaukee, the carriers estimated possibilities of some $73,000 yearly saving through terminal coordination. We think possibilities on the present basis are nearer $150,000 and that if the facilities and operations were coordinated between Milwaukee and Chicago the saving would more nearly approximate a million dollars annually. At Atlanta, a report was filed indicating no economy possible. Exception was taken to this report by the Regional Director and the project was resurveyed by the carriers on the basis of the plan outlined by the Director. This resulted in bringing the amount of potential economy to $361,000, the carriers, however, disagreeing as to the basis upon which the saving was predicated. It is the opinion of your staff that the possibilities are more nearly $750,000 than either estimate of the carriers.

A similar case was the coordination report at Denver, Colo. The first report resulted in a conclusion that a saving of $114,072 was possible, with a capital expenditure of some $2,000,000. The study was referred back. The second report indicated a saving of $298,202. It was the opinion of your staff that the possibilities were greater than the carriers' estimate indicated, and based upon an actual survey of conditions on the ground, and the information contained in the report as submitted, your staff conservatively estimated a saving of $650,000 with a relatively nominal capital expenditure.

JOINT TRACKAGE, INCLUDING BRANCH LINES

A few such projects were considered by the interested carriers; others were proposed by this Section. The field has not been explored to the extent of reflecting anything like full possibilities, because the carriers under the Interstate Commerce Act can apply directly to the Commission for relief (some lines are proceeding in this manner to relieve themselves of non-paying mileage); and, because, with the obstacles involved and a disposition to retain all their mileage, the carriers have not listed all such projects for consideration. The problem divides itself into two phases, one of obsolescence, the other of economy. The first pertains to lines constructed for transportation of timber, coal, oil or other raw materials now exhausted. There will be some increase of traffic on some of these lines with a return of normal business. Many of them, however, can be abandoned through substitution of trucks. The practicability of this is illustrated by the present operation of railroads which use trucks to pick up livestock as much as ten miles distant from the railroad, this being more economical from the carriers' standpoint than continued operation of unprofitable branch lines to service the traffic.

The second phase is that of paralleling lines and particularly those of low traffic density. Many obstacles must be overcome to realize economies from this source. First, all such lines are covered by mortgages, most of which require deposits with the trustees in the event of their abandonment. Few carriers now have funds to make such deposits to release property from the mortgage. The trustees are also unwilling to accede to breaking a line or partially abandoning it and using another line, because of seeming impairment of the permanency of the sections covered by the mortgage. A specific case arose in the Western Region embodying these difficulties. Line "A" ran closely parallel to line "B" for a considerable distance in a sparsely settled territory, and representatives of line "A" testified at one time that the continued operation of the line was costing them about $250,000 per year. It was later agreed between lines "A" and "B" that a saving could be made of $90,000 per year through joint use of line "B", the saving to be split between the two lines. Line "A" took the position that its mortgages prevented any agreement that would affect a continuity of its lines. The loss in operation continues.

It would seem the part of wisdom to dispose of such revenue-depleting operations. Action to that end should be made possible before the withering branches affect the whole plant. Some such instances should be referred by the regional coordinating committees to the Coordinator for an order. This could be reviewed by the Commission and the courts, if deemed necessary, and the legal question with respect to the mortgage determined. There are other cases throughout the country where similar conditions prevail and where we are confronted with the same obstacles in so far as mortgage contracts are concerned. There is also the obstacle of the line to be used being unable to give perpetuity of such an arrangement to the abandoning line. This, however, is not of the same consequence as the preceding obstacle. Traffic problems are also involved which seem to have greater influence in many instances than even mortgage restrictions. The present labor restrictions of Section 7 (b) of the Emergency Act also exist and there are objections on the part of the public. Such public objections are frequently not so much that the service would be impaired, but that the community would lose prestige by abandonment of the mileage. We have been informed that the law committee of the Association of American Railroads is preparing a plan to lessen the difficulties from these restrictions by enabling legislation.

COORDINATION OF BACK SHOPS AND GENERAL REPAIR PLANTS FOR LOCOMOTIVES AND CARS

The carriers having considered this subject only locally, your organization, after consideration, submitted a plan to the Western Regional Coordinating Committee containing an outline for procedure in exploring this field and a tentative basis for concentration of repair work that would apparently yield large economies over present methods of operation. The analysis of this primary item of operating costs is a task of major proportions. There is here involved a capital investment value approximating six billion dollars. The average annual repair expense during the ten years, 1923 to 1932, was 764 million dollars, or 27 per cent of the total expense of operation.

Conferring with the Western Committee, arrangements were made for revision of our outline, amplifying it in some respects so that all factors would receive consideration. Thereupon, a committee composed of mechanical and accounting officers of the railroads was

appointed to make a comprehensive survey of present facilities, methods of operation, costs, etc., and thereafter to estimate the economies and improvements possible by a practical coordinated arrangement. Later this same arrangement was extended to the Eastern and Southern Regions, where similar committees were appointed.

Questionaires for obtaining all important facts in relation to the subject are being filled out by individual lines and local committees, and returned for analysis. The work is well under way and the general committees are proceeding diligently to a conclusion and will be able to determine what economies are practicable and whether or not efficiency will be enhanced. The opportunities for economies probably lie in restriction of the number of plants operated, and in the coordination of operations and facilities; and the coordinated plants to be located at strategic and accessible points in each region, serving all roads; to be of modern construction and equipment, substituting a mass production basis for the present numerous individual plants operating intermittently, two days a week, or a limited number of days per month, with employe earnings consequently low, notwithstanding the standard wage scales. Many of these individual plants are of obsolete type and poorly equipped.

The most reliable information available indicates the railroads now own 403 locomotive general repair shops, 568 general repair car shops, and 3271 engine houses. Of the latter, 1118 are equipped to make light repairs and 950 equipped to make both light and heavy repairs. The plan projected contemplates reducing the number of general repair plants very materially, such plants to be located and operated as above indicated, performing all repairs of Class 1, 2, and 3, as outlined in U.S.R.A. Classifications; all Class 4 and 5 and running repairs to be made in engine houses properly expanded and equipped where necessary to meet required conditions for such locomotive repairs. The same general plan would be followed for general and heavy repairs to both freight and passenger cars.

It is not now possible to estimate the economies which can be obtained by these means, or to forecast all the obstacles which will be encountered. A great deal has already been accomplished by individual roads through restricting shop operations to a few of their most modern plants. For the year 1925 the amounts charged to shop expense, in its western region, by one of the largest railroads in the country was $5,082,000, since when it has steadily declined each year, in 1929 being $3,324,937 and in 1933 $1,456,148. Its charges to superintendence, maintenance of equipment, for this region of the line, were reduced from $323,475 in 1925, to $196,333 in 1929, and to $56,788 in 1933. It is logical to assume that similar economies would be possible by interline coordination.

Although many experienced mechanical men have made estimates of economies through such coordination, some to the extent of making calculations and setting up large amounts estimated as practical of attainment, with the survey in its present stage we do not feel warranted or competent to draw definite conclusions.

UP-TOWN TICKET OFFICES

Elaborate studies of this subject have been made by the carriers in the Western Region and to some extent in other regions. At no point have the carriers deemed it expedient to recommend changes in present practices.

Many inconsistencies exist in relation to city ticket offices. Some lines provide elaborate and expensive offices, while others operate jointly on a more moderate scale. A survey at Chicago indicated that 13 railroads in the Insurance Exchange Building were able to carry on a joint arrangement so far as office space, expenses, etc., are concerned, but continued to have separate ticket sellers, telephones and other facilities. This we think unnecessary; material economy is possible under a complete joint arrangement of forces and facilities. We also consider it entirely possible that if 13 railroads can operate in one office, the other roads having separate and expensive offices can operate in like manner. These conclusions are based on the fact that sales of some lines under joint arrangement surpass or equal sales of individual offices. For example, one of the 13 lines in the Insurance Exchange Building enjoys more passenger revenues from its sales than another comparable line having an expensive individual office. Our survey also revealed that a joint ticket-selling organization, sponsored by the roads, appeared the most effective method to sell tickets in a metropolitan area. One unit of this organization, located in a hotel in Chicago, with three men, sold more tickets than any individual up-town rail office where more men were employed at higher wages. These uptown offices at many points would appear unwarranted from the results reported by the carriers' committees making the surveys. Many instances

of sales expense are reported as being from 15 to as high as 25 per cent of the gross revenue, and in a few instances as high as 40 per cent. The expense of the joint ticket-selling organization referred to was three per cent. Nor do we find justification for expensive corner leases in downtown locations in large cities for selling tickets, in the light of current practices of carriers in delivering tickets by special messengers. Over 25 per cent of the sales are so handled at points like Chicago. At St. Louis it was readily admitted by some of the lines that the eight up-town offices could be consolidated into one with a saving of nine men plus $22,000 yearly rent. It would appear just as logical there to have eight ticket offices at the Union Station as it is to have these eight offices uptown side by side or on opposite corners. These up-town offices are as a rule closed Saturday afternoons, Sundays and holidays, when usually passenger traffic is heaviest.

With a view to giving a broader opportunity for selling railroad tickets in Chicago, we suggested to the Coordinating Committee for consideration the matter of utilizing one of the major telegraph companies as an agency through which ticket sales could be carried on, with employes jointly compensated by the interests involved, or the telegraph company acting as a direct agent for the sale of tickets. The telegraph company is particularly well adapted to meet this demand, as the two services can be made more or less complementary and can be handled by the telegraph company usually without additional help. Their messengers now deliver tickets sold. Combined with this arrangement we suggested a consolidated ticket office in the downtown area to handle the sales for all lines and in which the passenger traffic representatives could render satisfactory service to patrons seeking the service of a particular line. They could also furnish information to the telegraph company offices operating as joint ticket agencies throughout the city. Unquestionably sales possibilities could be extended by this method. The telegraph line considered has 53 offices in the metropolitan area and with trunk line telephone service and messengers, they would render, in our opinion, a more effective and attractive service to the public, to say nothing about the economies possible. Such an arrangement would be merely an amplification of the present small ticket-selling organization at the hotels, etc., that has demonstrated conclusively the principle involved. What could be done in Chicago in this respect is indicative, in our opinion, of what could be done at all points of consequence throughout the country. The carriers declined to consider this arrangement and have undertaken to justify their present methods and retention of expensive up-town offices, on the theory that their competitive situation demands this character of service. We do not concur in these findings and conclusions, but consider the practice one of duplicated and unnecessary extravagence and at most of questionable value. In this connection the Section of Transportation Service will reveal more definitely the actual costs and results obtained in its country-wide passenger calculations.

Volume 2

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SECOND

REPORT ON ECONOMY POSSIBILITIES
OF
REGIONAL COORDINATION PROJECTS

Vol. 2

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FEDERAL COORDINATOR OF TRANSPORTATION
WASHINGTON

JOSEPH B. EASTMAN
COORDINATOR

July 12, 1935.

TO THE REGIONAL COORDINATING COMMITTEES:

I submit herewith for your consideration a report from V. V. Boatner, Director of my Section of Regional Coordination. This report deals largely with the economies which are obtainable from the coordination or unification of terminal operations, although it also discusses certain other subjects. In addition to the main report, I bring especially to your attention Appendix A, which considers in more detail the surveys of terminal unification possibilities which have been made by carrier committees. The problems involved can not be well appreciated without consideration of this Appendix.

It is evident from Mr. Boatner's report that an immense amount of time and effort have been devoted by the carriers to these studies. I commend them heartily for this cooperation, and take occasion at the same time to say that I feel that excellent work has been done by my own small organization in reviewing the studies.

There can be little doubt, I believe, that there are large and important opportunities for economies in operation through terminal unifications. There may be, and are, differences of opinion in regard to the amount of the savings which are practicable, but I feel sure that after the studies which have now been made, few will question the above statement. It is equally clear, in my judgment, that such terminal unifications will not impair service to the public. On the contrary, they will in general improve it. To this statement there may be some dissent, but the fact is that ordinarily the wastes which the unifications will eliminate consume time and retard service. In the process of elimination, the movement of traffic will be expedited.

Now that the spade-work of inquiry has largely been done, the time has come for steps in the direction of accomplishment. I realize that there are many practical difficulties and obstacles in the way. Communities must be shown that they have more to gain than lose from anything which will improve the financial and competitive health of the railroads and enable them to build up their traffic. The projects should not be inaugurated without consultation with the communities. The legal rights and welfare of the railroad employees must be considered and repsected. Conferences and negotiations with them will be necessary. Individual railroad managements must be shown that they will not be hurt by, and will profit from, the proposed changes. Many contracts and other legal arrangements must be worked out.

The extent of these difficulties and obstacles, however, is certainly not a reason for failure to grapple aggressively with them. I stand ready, and so does my organization, to cooperate with you in such endeavors in every feasible and appropriate way.

Joseph B. Eastman

The extent of these difficulties and obstacles, however, is certainly not a reason for failure to grapple aggressively with them. I stand ready, and so does my organization, to cooperate with you in such endeavors in every feasible and appropriate way.

Joseph B. Eastman

REPORT ON REGIONAL COORDINATION

TO THE FEDERAL COORDINATOR OF TRANSPORTATION:

To the section of your staff which the undersigned directs was assigned the study of possible economies in operation which are localized to particular places, lines, or territories, including terminal unification, joint use of various facilities, pooling of train service, and the like. Two progress reports have been rendered. They outlined the work under way and described the surveys which were being carried on for the purpose of determining the opportunities for elimination of wastes and unnecessary expense. The present report describes, in general, the results of these surveys, many of which, although not all, have now been completed.

TERMINALS

Terminal operations are responsible for so large a portion of railroad expenses and consume so much time in the movement of traffic that they are of prime importance in the consideration of opportunities for profitable coordination of railroad activities.

Scope of Surveys. Surveys have been made at practically all places which are served by two or more railroads. Many of them, of course, are small points where expenses are, individually, of no great consequence. Collectively, even these small points are of importance. The surveys, with some exceptions, were instituted at the direction of the Regional Coordinating Committees of the carriers, and have been conducted by local committees made up, at each point, of officers of the interested lines. Our own regional organization is, as you know, very small. However, it has participated directly in the surveys at many of the larger points, and it has endeavored to check the results secured at other points. It has not been possible to cover many of the smaller points in this check, but it has been sufficiently extensive to appraise, not only the general character of the work done by the local committees, but much of the detail of their work.

In all, 5,015 projects have been or are being studied, the great bulk of which relate to terminal operations. Reports have been made upon 4,913 of these projects, but are still pending in the case of the remainder, 102. As shown in Appendix C hereto, the railroads have reported potential economies at $24,688,484. Reports which have been received but not yet approved by the Coordinating Committees show $6,916,655, a total of $31,605,139. Your regional staff, as a result of various studies, has augmented the carriers' estimates by $6,122,475. For reasons which are explained and illustrated in considerable detail in Appendix A, your Director has increased them still further by $8,365,734, and regards $10,000,000 as a conservative estimate of the economies possible at Chicago, where a report is still pending. These additions bring the total to $56,093,498. Other surveys yet in process, some of them at comparatively large points, the results of which cannot now be estimated, will increase this total still further. With very minor exceptions, the above estimates are confined to operations within the terminal areas. They could be expanded materially, in many instances, if the flow of traffic into and out of the terminal area were controlled by various joint traffic arrangements.

In view of the great magnitude of the investments in railroad property and facilities within the terminal areas, the necessity for considering service to the public by the carriers both collectively and individually, and the complexities of competitive situations, the work involved in these surveys has been of very large proportions and has consumed much time and effort. Both have been generously applied, and it is evident that much has been accomplished. The carriers are, subject to the qualifications noted in Appendix A, entitled to hearty commendation for their efforts to comply with the Emergency Railroad Transportation Act, 1933, and the requests of the Coordinator.

The Objective of the Surveys. In Appendix A and Appendix B, the objective which the Coordinator had in mind for these surveys is made plain. It was to discover the opportunities for economy in terminal operations which are physically possible, regardless of the difficulties which might be encountered in realizing these opportunities, owing to the competitive relations of the individual lines. It was thought best to discover the physical possibilities first and deal later with these difficulties, in order that the prizes to be gained if they were overcome might be clear and furnish an effective incentive to effort in surmounting the obstacles.

Many of the local survey committees followed this course with much fidelity. Their reports have been comprehensive and they have estimated conservatively the savings attainable under fully coordinated arrangements, at the same time keeping in mind the necessity for proper and adequate service to the public and providing therefor. We commend these excellent surveys.

On the other hand, reports submitted by numerous other committees reflect the disposition of the managements and employees to retain the individual activities of their lines in terminal operations, thus greatly reducing the savings and improvements in service which are obviously possible. Many concrete illustrations of this disposition and the results to which it led are given in Appendix A. It is not practicable, beyond certain limits, to coordinate and individualize at the same time. The inclination to resist coordination seems to be predicated upon the theory that each line is a private undertaking having nothing but individual responsibilities.

On exclusive local traffic, there is some justification for this theory, although common carrier responsibilities apply to even such traffic. But on through traffic, the movement of which requires more than one line, and which now constitutes 77 per cent of all freight carload traffic, each line forms only a part of the through route and performs only a part of the required carrier service. A single line would hardly seem warranted in retarding the flow and increasing the expense of such through traffic by multiplying yardings, switching, and accessorial services in order to preserve practices and assumed advantages which at best are of questionable value. There is a marked distinction between operating a private company which is engaged in a public calling, and forms only a link in the chain, and operating a factory or store privately owned and doing a wholly individual business.

Some of the reports controlled by this individuality complex, when analyzed by your organization, revealed greatly amplified possibilities. Many illustrations are given in detail in Appendix A. Our expansions of the estimates were made only after personal analysis of the physical situations, review of what the carriers have been able to accomplish in actual practice on their own systems or with other carriers through coordination, comparisons with surveys and estimates made by committees at other points with similar characteristics, and weighing all these factors by judgment based on long practical experience.

The Desire for Individual Service. The point made above warrants further comment. Joint facility arrangements are in effect at many common points. Were it not for certain physical difficulties, such arrangements could be made general at all smaller common points throughout the entire country with large savings. Ordinarily, joint arrangements in small communities can be effected without impairing the individual position of lines and with much convenience to the public.

In the larger centers, the situation is more complicated both physically and practically, the difficulties being enhanced by the importance which most carriers attach to their individual operations in the areas which produce heavy tonnage, operations which are necessary, they assert, to preserve their ability to compete for traffic and render satisfactory service. It is an axiom in the railroad world that a line with adequate terminal facilities, which embrace all requisites for satisfactory service in an industrial section, will secure a major share of the traffic flowing into and from such area and enjoys a "good will" value far beyond the line not so intrenched.

Such "good will" depends, of course, on the character and quality of the service furnished and also, to some extent, on courteous and accommodating personnel. The latter has reference to the officers and employees who come into direct contact with patrons. So far as the mechanism of operations is concerned, and the employees having to do with that mechanism, shippers are interested only in the quality of the resulting product, i.e., the service furnished. It is with reference to this mechanism of operation, such as yards, joint main tracks, engine houses, repair and servicing facilities, and transfer runs, that coordination can be utilized to the greatest advantage. Its purpose is to eliminate wastes and unnecessary expense, and in the process it will at the same time eliminate or reduce time consumed in operation and delays in service. No one who faithfully explores the maze of classifications and transfers and unnecessary movements which are involved in individual railroad operations within a large terminal district can have any doubt on this point. Coordination in terminal areas will, therefore, improve the quality of the railroad product and increase the element of shipper "good will" for all the railroads concerned.

Nevertheless, the fears persist that coordination will diminish the advantages which lines strategically located in such areas now enjoy. These fears pervade the entire personnel and have a far-reaching effect. As pointed out in greater detail in Appendix A, modern conditions and requirements tend in large measure to lessen these strategic advantages, and their exact value in a reciprocal switching area has never been measurable. When realization sinks in of the counter advantages which coordination can produce in both expense and service, it is believed that the attitude of railroad managements will change. These advantages can be made to yield reasonable compensation for all interests.

At the risk of repetition, attention may again be directed to the fact that it makes little difference to an industry whether Engine No. 1 with Foreman Smith sets and pulls the cars or whether they are handled by Engine No. 2 with Foreman Jones. Certainly no industry cares which of such units switches the cars in the classification yard some 10 or 15 miles away, or which transfers the cars between the classification yards and the industrial area, or to the team tracks. No purchaser is concerned whether the socks he buys from Marshall Field & Company are knitted in that company's plant in North Carolina or procured from a separately-owned knitting mill in Massachusetts. The mills and their personnel obviously have no "good will" value in the merchandising of Marshall Field & Company's goods, other than that the quality and price of the socks be acceptable. Yet the desire to retain control and direct the performance of similar operations seems to be regarded as of much consequence by many railroads. The illustrations in Appendix A show the extent to which this desire exists.

Other Obstacles to Coordination. The labor problem is undoubtedly a serious obstacle to the working out of coordination projects. Section 7 (b) of the Emergency Act is not wholly responsible for this problem, for it existed prior to the Act. Labor has always been a factor. Each line has its own seniority rosters and working conditions which present difficulties, and must always give fair and just consideration to its labor obligations. Yet, for reasons which the Coordinator has pointed out, this obstacle is not insurmountable. It should yield to negotiations conducted by both sides with realization of the fact that their own welfare is bound up with the welfare of the industry. Competitive transportation forces are now too prevalent and potent to be disregarded. They can only be met by bringing railroad expenses and rates to the lowest reasonable level and raising service at the same time to the highest reasonable level.

Mortgages may cause difficulties in coordination, where they are involved on property released by one line to effect savings for all lines, but these difficulties should be capable of solution. Such mortgages usually cover other portions of the lines, and if the arrangement can be made permanent, with demonstrated advantage to the releasing lines, satisfactory adjustments with the mortgagees should not be hard to reach. Certainly the latter have nothing to gain by standing in the way of improvements which will increase net earnings.

After dealing with the situation and with the carriers' officers and managements, during the two years in which your organization has been active, your Director believes that the considerations described above, and particularly the desire to retain individuality of service, constitute the chief obstacles to terminal coordination and are responsible for the adverse attitude which now exists in the case of many of the railroads.

The Method of Coordination. The most logical and completely effective way to coordinate extensive terminal operations would be to create a separate corporation, controlled by the interested lines, to take over the ownership of all property and facilities affected and render a complete service for all interests in the prescribed terminal area.

There are, however, complications in such procedure, by reason of mortgage restrictions, leases, contracts, traffic advantages, property not required for collective use, and special operations such as general shops, suburban service, etc., which may best be left to the owning lines. It would require an indefinite time to resolve these difficulties and work out all details, and might involve certain capital expenditures in the acquisition of properties. The same general results can be obtained, with far less confusion and delay, by the establishment of a terminal association in which each line will participate on relatively equal terms. Such an association could take over, under reasonable leasing arrangements, all facilities required in the area to render adequate service for all interests, and operate as a joint agency for all the railroads in the area, expanding and contracting as circumstances might make expedient. In fact, such arrangements are practicable without actual leasing of property, under contracts for the pooling of operations, as has been demonstrated in actual practice at Los Angeles, Houston, and other places.

Districts wholly served by a single carrier operation, involving no duplication in service and facilities and no unnecessary expense, could, where desirable, be excluded from the arrangement. In such instances, provision should be made, however, so that the coordinated terminal management would have sufficient authority over the independent operation to insure that it will blend effectively and economically with the unified terminal operations.

COORDINATION BEYOND TERMINAL AREAS

Previous reports indicated that frequently economies could be considerably expanded if, in surveying the opportunities in a terminal area for coordination of operations and facilities, the exploration were extended beyond the immediate area to the degree necessary to overcome physical restraints within the terminal limits, thus avoiding prohibitive or abnormal capital expenditures that cannot be undertaken at this time. In a few instances the survey committees have extended their inquiries along such lines. Outstanding illustrations are Pittsburgh, Buffalo, Duluth, and the Uniontown-Brownsville district.

To get the traffic into a concentrated yard or area and reduce switching and interchange in order to effect material savings, it is frequently necessary to control the flow before the traffic enters the terminal district. At the abovementioned points, the studies went into that phase of the situation. The results amply justified the procedure, and it was found that the traffic flow could thus be controlled with little effect upon the operation of any individual line. If a like course were pursued throughout the country, where similar conditions obtain, the estimated savings would, in many cases, be considerably enhanced. Furthermore, pooling the movement of carload and less-than-carload traffic, discussed in our report of February 14, 1935, would add to the savings in large degree. Specific instances of such opportunities for pooling were referred to, as, for example, between Omaha and Chicago. The survey of the carriers of the area between Portland, Oregon, and Vancouver, B.C., and Ellensburg, Washington, further demonstrates the possibilities in this respect. Applying switching costs per car outlined in our progress report of February 14, which are a little lower than the average switching rates of the country, and considerably lower than costs reported by your Section of Transportation Service, the economies estimated appear highly conservative, although here, as elsewhere, the use of a yardstick is not wholly accurate, for the reason that operations and conditions nowhere yield to exact yardstick measurement.

CONFERENCES ON COORDINATION
KANSAS CITY, INDIANAPOLIS, AND BIRMINGHAM

In your communication of July 17, 1934, to the Regional Coordinating Committees you requested, as a test of the practical obstacles in the way of realizing the opportunities disclosed by the surveys for obtaining economies through terminal coordination, that at three representative points, one in each of the regions, conferences and negotiations be undertaken by the interested lines to see whether they could agree upon a plan for making the proposed coordination effective. If they could not agree, they were requested to report in detail the reasons for the failure. The three points originally selected were Kansas City, Detroit, and Birmingham. Later, Indianapolis was substituted for Detroit.

Eight of the twelve lines involved at Kansas City proved willing to go along with a complete pooling arrangement for a trial period. Unanimous agreement, however, could not be reached. An effort is now being made to make effective such economies as can be had without property commitments or relinquishment by any line of a major portion of its activities within the terminal area. Obviously little economy or beneficial effect on carrier service will result from such a limited arrangement.

At Birmingham, the report of the conference committee indicates that the lines are unwilling to proceed upon any basis tending to change present control over their own individual operations within the terminal area. This has been the extent of their reply to your request. We have asked for further conference with the executives of the interested lines. Detailed comment on the Birmingham situation appears in Appendix A.

A committee representing the interested lines at Indianapolis reports that a serious endeavor is being made to effect a general pooling arrangement without disturbing property ownership.

FREIGHT HOUSES, TEAM TRACKS, PRODUCE TERMINALS, DOCKS, WAREHOUSES, AND APPURTENANCES

The number of these facilities can be materially reduced and, in our opinion, the public will continue adequately to be served. It is clearly shown in the surveys that joint use of facilities of this character will effect material savings in operation. Probably of as great importance is the fact that under coordinated operation, additional duplicate facilities would not be built. Each line, operating separately, when faced with a competitor establishing facilities of this character, feels, to protect its own position, that it is forced to construct and operate similar facilities within the same area, when one unit would ordinarily accommodate adequately the traffic involved. This is now going on in the construction of water-level piers at Norfolk, and produce terminals at Cincinnati.

POOLING OPERATIONS

In passenger service, there is pronounced duplication in operation of passenger trains between the various travel centers, these trains frequently departing from and arriving at terminals, over different lines, at the same hours. Some of the service is justified, to meet intermediate needs. But there is no justification for simultaneous departures and arrivals over all of the lines between important points, such as exist between Chicago and the Twin Cities, and between Chicago and St. Louis, and numerous other centers. Nor is there justification for the large number of through cars over several routes to the same points, with small per-car occupancy. A check made by your southern regional director of nine such cars operating to Florida points, in January, 1935, showed an average of 6.3 passengers per car, with averages of four of the cars - 2.0 - 2.2 - 2.4 - and 3.5 passengers per trip, respectively. It is doubtful if such cars pay their way, and they subtract that much from the other Florida trains, of which there are an ample number. Some consideration has been given to pooling these activities, but, incident to intermediate traffic involved, it has been difficult for the railroads to work out a satisfactory schedule for each line that would enable it to enjoy what it considers its share of the traffic. This duplication has been accentuated by modern, streamlined trains, and faster schedules, recently added to the normal complement of schedules in effect. Capital expenditures of considerable consequence are being made by some lines to provide this new service. It appears that the duplication is becoming more and more pronounced. Investigation of this phase is now under way, but the data are not yet available for report.

Modernization of passenger equipment, through lightweight, Diesel-powered, stream-lined trains, and the new high-speed, steam-powered trains, reflect a commendable effort on the part of the carriers to meet modern travel requirements. We suggest that no obstacle be placed in their way in this respect. The Coordinator and his staff have endeavored to encourage innovations and wholesome experimentation along these lines. Not only is it important that the railroads make every reasonable effort to retain the present volume of their passenger traffic, but it is imperative for them to increase it to the greatest extent possible. On the other hand, with uncontrolled duplication between roads, it appears probable that any increased revenues will be completely dissipated and a considerable depletion of net earnings result. Innovations in equipment and service should be encouraged, but there is no reason why a number of lines operating between common points should not pool their operations, even to the extent of pooling revenues, if necessary to obviate the abnormal expense that will other wise accrue.

UPTOWN TICKET OFFICES AND SALES PRACTICES

This subject was commented upon, in some detail, in our progress report of February 14. From the information received, concerning expense and results secured therefrom, it is obvious that many practices engaged in, relative to uptown ticket offices, are duplicate and wasteful, and the results secured from many of these extravagant operations are not of sufficient consequence to justify the procedure.

Since making this report, your Section of Transportation Service has made an elaborate, detailed report on the passenger traffic performance of the railroads, and has so completely developed sales practices and costs incident thereto, with relative results secured, that we feel it unnecessary to make any further comment in regard to this particular matter.

FREIGHT SERVICE

In our report of February 14, 1935, we outlined how material reduction in cost of operating fast freight service could be obtained by pooling operations between common points. This would not only produce line economies, but materially enhance the savings that would accrue in terminals. The subject was dwelt upon at length in the previous report and is only referred to here to stress the potential economies inherent in such arrangements, and again to call attention to the fact that the public would suffer no inconvenience from such operation. Generally the service would improve. The savings estimated from such pooling of less-than-carload operations in and out of Chicago alone approximate $3,600,000 yearly, and a low estimate for the country is $23,000,000. Extended to carload traffic, such operations have further possibilities of economy of even greater proportions. Pursuing such pooling of operations to the maximum, in our opinion, would produce more than twice the savings to the railroads shown as possible in the estimates relative to coordination of facilities and operations in terminals and environs.

ABANDONMENT OF JOINT USE OF LINES

Our progress report of February 14, 1935, set forth the action we have taken with respect to this particular item of operating expense. It was also explained that as the railroads can apply direct to the Interstate Commerce Commission or State commissions to secure authority for abandonments of lines or joint use, we have not gone extensively into this matter.

The difficulty experienced in overcoming one of the primary obstacles, that of mortgage provisions, was explained in detail. Obviously, a disposition to deal more aggressively with this obstacle is to be desired. The press has carried statements of various executives, and of the President of the Association of American Railroads, in regard to the large amount of mileage now jointly operated and the frequent joint use of facilities, stating that coordination of facilities and services of this character is nothing new. It is true that a large amount of mileage is jointly used, but there has been no wide accomplishment in the abandonment of one of two paralleling lines and joint use of the other. Definite arrangements of this kind have been effected, in a few instances of consequence during the past two years, with relatively large resulting savings. Others are now being considered.

There is so much parallel mileage, particularly of light lines, where all the traffic of the two could be amply accommodated on one, under joint operation, that economies in this respect could reach proportions of consequence. The possibilities greatly exceed those claimed by the President of the Association of American Railroads as having been realized in the past. It is significant that all such statements concede that joint use of one line by two or more carriers is economical, as compared with a line for each carrier, where the traffic can be adequately and efficiently accommodated; also, that economies result from joint arrangements or unified operation. This position, however, has not always been taken by the committees reporting on just such arrangements under the Act, as we shall point out. It has been our purpose to demonstrate the economies from the experience with the unified operations and joint use of lines and facilities now actually in effect, and we are reassured in our conclusions in this respect by the public statements of rail executives and the President of the Association of American Railroads.

A few outstanding illustrations of such situations with possibilities seemingly great are here mentioned: These are the Chicago & North Western and the Chicago, Burlington & Quincy lines between Illco and Shoshoni, Wyoming, referred to in our progress report of February 14; the Union Pacific, the Utah, and the Rio Grande & Copper Range operations between Helper and Ogden, Utah; the six lines between Toledo and Detroit; and the lines between Portland, Vancouver, and Ellensburg, Washington.

In regards to the North Western-Burlington situation in Wyoming, it was shown that savings of $94,000 per annum could be realized by joint use of the Burlington lines.

The Utah situation was reported upon without survey and negative results were indicated. Our estimate on this project, extended to include pooling of facilities and operations throughout the area, including Salt Lake City, is that the potential savings approximate $800,000 per annum.

Between Toledo and Detroit, it was suggested that a study based on confining operations to the two double-track, parallel lines of the Michigan Central and the Detroit & Toledo Shore Line, eliminating four other routes, be surveyed and reported upon. A committee made report on a limited concentration and estimated a saving of $115,932 per annum. By utilizing the plan we suggested, the estimate, based on the figures submitted by the committee, would result in reduction in train mileage alone that would yield economies approximating $450,000 per annum. There are further possibilities in collateral operations that would augment this estimate.

The Portland-Vancouver-Ellensburg project was surveyed by a committee which estimated savings of $253,497 from such an arrangement. There are a great number of paralleling situations of this nature all over the country that are susceptible to treatment by joint use and pooling, the amount of savings being limited by the extent to which the process is engaged in. Such projects offer great possibilities of economy.

The serious difficulties militating against these arrangements lie in mortgage restrictions, public resistance, and reluctance upon the part of the carriers to relinquish independent access and operation. None of these obstacles is insurmountable, but they will require time and negotiation and a definite effort upon the part of interested lines to arrange the most economical operation with due regard for public service. Many arrangements exist where one line uses another's tracks over a considerable distance into terminals to effect economies, such arrangements having been made when the junior line was constructed. This joint operation has not in such cases affected the identity of the junior line in the community so reached or prevented such line from enjoying its share of the traffic. Outstanding illustrations of present operating arrangements of this nature are the operations of the Santa Fe and the Southern Pacific from Mojave to Bakersfield; those of the Union Pacific and the Santa Fe from Santa Barbara to Los Angeles; those of the Gulf, Mobile & Northern and the Southern from Slidell to New Orleans; those of the Gulf Coast Lines and the Yazoo & Mississippi Valley from Baton Rouge to New Orleans; and those of the Chesapeake & Ohio and the Southern from Charlottesville to Washington. There are numerous such arrangements throughout the country. Recently effected was the line abandonment of 60 miles of main track of the Duluth, South Shore & Atlantic and the use of the Northern Pacific line from Superior to Ashland, with savings of a relatively large amount to the former and corresponding rental return to the latter.

Attention was called in our previous report to specific instances of inability to satisfy mortgage restrictions and requirements of trustees. Without question the financial health of the properties would be improved were these arrangements made effective. It is suggested that definite instances be submitted where agreements with trustees cannot be reached and that an order issue from the Coordinator. This order could be reviewed by the courts for determination of the legal questions involved, with a view to facilitating the progress of economy and improvement in earnings, not only on the section of line covered, but on the entire system of the carrier.

We have not undertaken to secure definite figures as to branch line or light mileage that is being operated at a loss and serving no particularly useful purpose under modern transportation conditions and demands. Various estimates have been made and unquestionably a very large amount of branch line railroad mileage is today subject to this condition. Many of the larger systems are divesting themselves as rapidly as practicable of such unprofitable mileage, while others are taking little or no action in this respect, some mileage being retained and operated even at a loss for the purpose of protecting a competitive situation. While this may be justified, there seems to be no good reason why such needs could not be covered by use of motor trucks on highways, at the same time improving the service and reducing the expense.

MECHANICAL

Our February progress report covered this phase as fully as we were in position to do at that time. Except that the work has continued in each region, our present information is little different from that reported.

It is an exceedingly large and difficult survey, embracing, as it does, nationwide activities of all the carriers. The three committees have diligently pursued the study, data relating to facts and conditions have been secured, they are now being compiled, and findings and conclusions are expected from each committee within the comparatively near future. Pending conclusions and recommendations, we shall withhold further comments at this time.

CONCLUSIONS

1. Where susceptible to coordination, present unit-operation of facilities in large terminal areas is obsolete, a relic of rail monopoly in transportation and a half measure between transferring freight by hand from one line to another, which was done in the 80's and 90's to preserve individuality, and modern methods that should join through routes and movements in an effective and efficient national transportation system.

2. Coordination of terminals and facilities is, in general, practical and will result in large savings and improved service.

3. Savings can be greatly augmented, both in line and terminal operation, by coordinating and controlling the flow of traffic into and between terminals. Such economies can be secured by trackage agreements or by reasonable pooling arrangements for moving the traffic.

4. Unnecessary duplication of service and facilities exists and continues, requiring large capital expenditures and depleting railroad revenues.

5. It is desirable to have major terminal areas owned and independently operated under joint control of interested lines. Property holdings, rights and privileges, mortgages, contracts, special and wholly individual operation, and other serious obstacles render the blending together of such an arrangement involved and difficult and subject to much delay and controversy. However, terminal railroad associations can be established as cooperative organizations and it is reasonable and practicable to commit property to such associations under lease, effecting arrangements that will enable operations of service and facilities the same as if properties were purchased or owned. It is equally practicable to delegate jointly all operations of service and facilities, either as a whole or to a limited extent, to such an association without lease or any definite commitment or transfer of property, by the use of pooling contracts. Such formation of a cooperative operating association can effect, not all, but the major portion of savings practical of attainment under coordination. To such association can be transferred such portion of the personnel required, with right of jurisdiction, if necessary, over all. Property use and loss of any advantageous position that might result can be compensated from savings in due proportion; operations, where wholly of an individual nature, can be excluded. Individual service in train yards, transfer operations, freight houses, team tracks, etc., is of questionable value in promoting "good-will" and securing patronage. Such advantages have been impaired and are in process of complete nullification by the carriers themselves, through their use of trucks, and by reason of the traffic which moves exclusively by trucks.

V. V. Boatner

Director of Regional Operations

July 1, 1935.

APPENDIX A

APPENDIX A.

In Appendix B, the communications are set forth which the Coordinator sent to the Regional Coordinating Committees on November 20, 1933 and July 17, 1934. They show (1) the basis on which the railroads were requested to survey and report upon the physical possibilities of economy through terminal unification, and (2) the tests which they were requested to make to determine the obstacles of one kind and another which may stand in the way of the realization of these physical possibilities. The thought was, in short, to determine the maximum potentialities of economy through unification or coordination of terminal operations, and then to find out how close to this ideal it is possible to come as a practical matter. All of the facts, both favorable and otherwise, were desired as a basis for working out a practicable solution.

The savings were to be estimated upon the basis of operation and performance with present facilities and present flow of traffic, with provision for such reasonable expenditures as would be required for expansion in anticipation of return to a normal traffic flow. Upon this basis and working with the Coordinating Committees and railroad sub-committees, we have endeavored to secure a conservative estimate in relation to each project.

The Coordinating Committees placed before the railroads the basis upon which to proceed, and thereafter the work was to a large extent left to individual survey committees composed of railway officers and employes of the lines immediately concerned. This resulted in a variety of estimates and conclusions, some of which were excellently calculated and comprehensively prepared, revealing a conservative approximation of the economies which would result under coordination with due regard to public service. Among the surveys of this character were those in Portland (Maine); Boston, Springfield, Worcester (Massachusetts); Mechanicville, Buffalo (New York); Philadelphia, Pittsburgh, Brownsville-Uniontown District (Pennsylvania); Wheeling (West Virginia); Montgomery (Alabama); Portland (Oregon); Seattle, Spokane (Washington); Mankato, Duluth (Minnesota); ore traffic, Virginia, Minn. to Duluth; Helena, Great Falls (Montana); San Francisco (California); Ogden (Utah); Omaha (Nebraska); Cedar Rapids, Des Moines, Sioux City (Iowa); Sioux Falls (South Dakota); Green Bay (Wisconsin); Rockford (Illinois); Wichita, Topeka (Kansas); Tulsa (Oklahoma); El Paso, San Antonio, Fort Worth, Dallas, Houston, Galveston, Beaumont (Texas); and others.

On the other hand, where physical lay-out and abundance of facilities should produce equal or greater relative results, the conclusions of the survey committees range from what we consider about 50 per cent of the possibilities which would accrue from coordination to nothing at all. Among the outstanding surveys of this kind were those at:

Atlanta, Ga.
Albany, N. Y.
*Norfolk, Va.
Evansville, Ind.
Columbus, Ohio
St. Joseph, Mo.
Salt Lake City, Utah
Mobile, Ala.
Tampa, Fla.
Memphis, Tenn.
Cairo, Ill.
Indianapolis, Ind.
Denver, Colo.
Syracuse, N. Y.
Jacksonville, Fla.
Charleston, S. C.
Louisville, Ky.
Chattanooga, Tenn.
Detroit, Mich.
Casper, Wyo.
Mason City, Iowa.
Milwaukee, Wis.
Waterloo, Iowa.
Augusta, Ga.
*Richmond, Va.
Cincinnati, Ohio
Youngstown, Ohio
Toledo, Ohio
Phoenix, Ariz.
Jackson, Tenn.
Fort Smith, Ark.

* Original report.

Surveys at the smaller points were generally fairly reflective of the possibilities. The economies in many instances were fully estimated, although in others they could be increased with but little re-arrangement and expense.

Of the projects listed by the railroads for survey, a large number were dropped "account lack of merit." Many of these related to small points, but some were of consequence. There were reports of this character in all three regions. Physical conditions preclude combining the operation of facilities and services in numerous cases. The number of projects dismissed as without merit was so great and covered so wide an area that it was possible for your small organization to visit only a few of such places and analyze the situation on the ground. Some of those visited revealed savings of consequence and reports were revised. A few illustrations in each region will suffice to indicate that, surveyed with an open mind and with a genuine endeavor to reflect the economies physically possible, substantial economies were found practicable:

EASTERN REGION

			Carriers' Estimate	Regional Director's Estimate
Delphos, Ohio	-	Dropped by Carriers	0	$ 12,948
Danville, Ill.	-	" " "	0	14,420
Akron, Ohio	-	" " "	0	70,000
Battle Creek, Mich.	-	" " "	0	68,900
Ft. Wayne, Ind.	-	" " "	0	39,334
Fostoria, Ohio	-	" " "	0	27,532

SOUTHERN REGION

Mobile, Ala.	-	Dropped by Carriers	$ 4,248	$147,363
Hattiesburg, Miss.	-	" " "	0	37,319
Jackson, Tenn.	-	" " "	0	115,374
Tampa, Fla.	-	" " "	0	87,810
Louisville, Ky.	-	" " "	0	482,129
Evansville, Ind.	-	" " "	2,343	197,965

WESTERN REGION

St. Joseph, Mo.	-	Two reports nothing. Third Third report directed by Presidents of three lines	$58,000	$232,000
Wichita Falls, Tex.	-	Dropped by Carriers	0	145,000
Mason City, Iowa	-	" " "	8,316	70,286
Bloomington, Ill.	-	" " "	501	28,577
Casper, Wyo.	-	" " "	0	99,508
Ft. Smith, Ark.	-	" " "	353	67,000
Muskogee, Okla.	-	" " "	* 5,232	37,314
Cairo, Ill.	-	" " "	2,446	87,337
Phoenix, Ariz.	-	" " "	* 4,500	75,000

* Increase over present expense.

Obviously carriers' committees pursued the same course in many of these "lack of merit" projects as has been indicated in the examples given, and they have potential savings of large amounts in the aggregate.

At your suggestion to the Coordinating Committees, your regional forces participated in the surveys at Kansas City, Omaha, St. Louis, Chicago, St. Paul-Minneapolis, New Orleans and Birmingham. This participation was to a large extent confined to outlining a plan and designating the method of the surveys, and did not extend to the actual calculations. The Coordinator's staff assumes responsibility for the bases upon which most of these specified surveys were compiled. Certain exceptions are noted below. These bases necessarily affected the conclusions reached by the committees where the principles laid down were adhered to definitely. We also assume responsibility for conclusions relating to certain interests which would be favorably or adversely affected under these plans and principles.

The obstacles to consummation of the projects, as generally set forth in the reports, are, (a) physical restrictions or large capital expense required to make practicable, (b) coordination physically possible, but facilities not sufficiently ample for combined operation, (c) restrictions regarding labor under Section 7(b) of the Emergency Act, (d) public interest, and (e) charge-offs due to abandonments. Such difficulties were definitely stated in many of the reports. Others not so stated are, (a) property values and rentals for joint use, (b) abandonment of facilities and the problem thereof, under mortgage provisions, (c) advantageous location and the opening for common use of extensive exclusive facilities now owned and operated by single lines, (d) traffic values, inherent in the ownership and exclusive operation of such facilities, (e) disposition to preserve individual control over operations in order to retain "good-will" incident to ability to render special service, and (f) preservation of influence and importance of personnel.

The solution of these problems, to permit realization of the savings, is not easy, demanding much time and thought. Physical restraints are self-evident and either can or cannot be overcome. The public interest in good service is controlling, but can be protected as other obstacles disappear. Usually service can be improved through coordination of facilities. This is demonstrated by the results where coordination has been effected by combining multiple units of operation within a system, as well as those of two or more lines. In no instance has impaired service to the public been reported where coordinating arrangements have been installed, either by intra or inter-system combinations.

The labor phase is of great importance and requires negotiation and adjustment. It is not a new problem. It has always been susceptible of treatment between management and employes. The force depletions which will result in many cases constitute only one factor in this perplexing labor problem. Men have definite rights on individual seniority rosters which are of great personal value. These rights and privileges and working arrangements differ among lines. An equitable adjustment in this respect, while formidable, should be possible, if the interests involved approach the problem upon a reasonable plane, fully realizing that many present methods of operation are obsolete under today's demands, both as to time and cost. Under the Emergency Act, Section 7(b) has affected the situation, but even here a sympathetic understanding and approach to the problem by management and employes will, we believe, lead to reasonable adjustment. If employment is to be constant and permanent, it must be upon a sound basis of productive yield at reasonable cost.

Your instructions to disregard property ownership and rights incident thereto in determining the possible savings by coordination made comment and suggestions by the committees concerning the solution of these phases unnecessary. The reason for disregarding property rights, ownership, traffic advantages, labor factors, etc., in making the surveys, was to prevent the physical possibilities from being subordinated to such matters. If the ultimate possibility of economy proved to be great, manifestly it would stimulate effort to overcome these other obstacles which might not otherwise be exerted.

It was comparable to making a survey to secure a low-grade line, to reduce costs of operation as compared with heavy grades, curves, etc. The survey is primarily to locate a line where the proper grade can be secured. When that is accomplished, and an estimate of its cost and resulting savings is at hand, negotiations can then proceed for right-of-way, street franchises, and other necessary features.

Variations among the respective lines in property holding, position, and service rendered make any arrangement for joint use or coordination a problem of consequence. No line having what it deems to be a material advantage is willing to share it with competitors, at least not without definite compensation therefor. An unusual breadth of view in this respect was displayed by 8 of the 12 lines at Kansas City in an endeavor to make a practical experiment. Similar breadth of view is reported by most of the interested lines at Indianapolis. These experiments, if they can be tried, should pave the way for permanent arrangements based upon the proven results secured.

There is a disposition to attach altogether undue importance to assumed present traffic advantages. Our previous reports referred to this phase and we reiterate here that in large areas served by many lines these advantages have been greatly lessened by motor vehicle activities and other influences. More and more the carriers are tending toward the use of motor vehicles in making carload deliveries, thus invading exclusive industrial areas of competing lines. Two of the largest lines entering Chicago today engage in this practice on automobile traffic, and it is only a matter of time until it will extend to other traffic. Thus the traffic advantage of terminal location is rapidly succumbing and whether it justifies the expense involved in preserving it is every day more questionable. Lines in some areas are operating bus service upon highways in territory not served by their own rail lines, and directly in competition with other rail lines. Other railroads are operating motor trucks in the same manner. This is a separate matter and is being given separate attention. It is mentioned here only to indicate that the value of exclusive and individual ownership of a line or the tracks in and serving an industrial area, which has seemed to many railroads so important of preservation, is in process of gradual nullification by the action of the roads themselves.

Moreover, the value of rendering an individual terminal service through a road's own facilities and employes is in any event intangible and highly speculative. To carry this to the point of operating individual train yards to separate the cars, with each line in the terminal area transferring cars to and from interchange points, industries, team tracks, house tracks, freight houses, produce terminals, stock yards, etc., operating light in one direction, certainly has no service value to the public and little, if any, traffic or "good-will" value to the respective railroads. Traffic managers of Marshall Field & Company, Montgomery-Ward, Sears-Roebuck, U.S. Gypsum, U. S. Steel, the packing plants, Jones & Laughlin, Union Carbide, Shell, Standard, Sinclair, Texas Oil, American Can, Morton Salt, Corn Products Refining and similar concerns throughout the country can have no interest in the particular engine crews that switch the cars at Proviso, Blue Island, Clearing, Markham, Potomac Yard, Argentine, Hardenville, Waverly, and other large classification yards, 10 to 15 miles away from their plants. To prevent engines of several individual roads from switching and disturbing industry operations at many large plants, it is common practice for the railroads concerned to alternate in doing all the switching. Some industries have their own engines and crews which receive cars from, or deliver them to, the connecting trunk lines or belt lines serving all railroads in the area. Certainly no railroad gains any traffic advantage from using a separate engine to transfer cars to and from tracks of industries served in such manner.

Close relations of railroad personnel with shippers, combined with an eager disposition to render efficient service even to the point of anticipation, unquestionably are valuable to the public, retain patronage, and doubtless secure traffic. They create "good will" for individual railroads. But there is little reason why such pleasant and wholesome relations cannot be preserved for all lines under joint terminal arrangements. They have been preserved in many terminals where such joint arrangements now exist, and they can be and are supplemented by intensive solicitation and service agency work. The elimination of gross waste in terminal operations, through cooperation and coordination, need in no way destroy individuality in railroad service.

EXCEPTIONS TO AND AMPLIFICATIONS OF REPORTS

The basis has been explained for the exceptions which the Coordinator's staff has taken to the findings of certain of the survey committees, and for the resulting amplification of their reported economies. Specific reference should, however, be made to a number of reports, where the findings were largely negative, or reflected only a portion of the possibilities.

The most pronounced instances of negative or partial results from surveys at large traffic centers were those of the original surveys at St. Joseph, Casper, Phoenix, Salt Lake City, Denver, Atlanta, Richmond, Norfolk, Toledo, Cincinnati, Detroit, Louisville, Evansville, Syracuse, Cairo, Bloomington, Savannah, Battle Creek, and Port Huron, including the survey of multiple service between Toledo and Detroit. Many others at lesser points were, of course, subject to the same criticism.

In general, the reports set forth clearly the details of operations of all lines involved at the points mentioned. The surveys, however, reflected an effort to protect individual operations which resulted in failure to arrive at proper estimates of economy possibilities. Such efforts were obviously induced by a desire to defend and preserve present methods and to discount the advantages of coordination.

TOLEDO

A possible saving of $42,139 per annum was reported by the Toledo committee. In Toledo, the New York Central operated four separate units prior to 1930, each of which involved more or less individual service in so far as train yards, engine houses, car repair plants, etc. were concerned. Since 1930, these independent operations have practically disappeared and a coordinated arrangement has been made effective for the four lines. The independent North Yard of the Michigan Central, with all its appurtenances, including engine houses, etc., was closed, trains now moving direct to and from Stanley Yard. Also the Air Line yard, engine houses, car repair plants, multiple freight stations and other operations were closed and operation concentrated in the one facility. By this arrangement the New York Central system reports that an economy of $536,000 per annum was realized. Through the same character of concentration between two lines of the same system at Cleveland a saving of $578,000 per annum was effected. In neither case was there any impairment of service. It is claimed to be better than ever before. At Toledo, there remain 9 other separate lines, making a total of 11 with the coordinated New York Central unit and the Toledo Terminal Independent operations are, thus, now conducted by the

Detroit, Toledo & Ironton
Ann Arbor
Nickel Place
Detroit and Toledo Shore Line
Wheeling & Lake Erie
Chesapeake & Ohio
Baltimore & Ohio
Wabash
Pennsylvania
New York Central
Toledo Terminal

The Toledo Terminal connects with and serves all lines. With few exceptions each line operates independent facilities for all services. Interchange of carload traffic between the lines is relatively heavy and the transfer cuts in line-to-line travel move from 2 to 15 miles. The three large classification yards which are in proximity on the south side of Toledo, namely, Stanley (New York Central) and those of the Pennsylvania and Chesapeake & Ohio, would adequately accommodate the traffic of all lines, which could move directly into these yards and thereby eliminate a major portion of the transfer movements, together with duplicate classifications and switching incident thereto. Likewise, the incidental facilities and appurtenances, such as round houses, freight houses, team tracks, repair tracks, car inspection, etc., would be materially reduced. If the operation of all 11 lines, including Toledo Terminal, were coordinated in the same manner that the four lines of the New York Central system were merged and coordinated, in our opinion it would result in savings exceeding one million dollars a year on present flow of traffic, with a material improvement in service to the public.

This is a rather formidable estimate when compared with the $42,139 reported in the carriers' survey, but we are confident that it is attainable under complete coordination. Physical obstacles at Toledo are of small consequence. Many of the lines connect at grade, and the Toledo Terminal, owned by all the roads, intersects them and affords great versatility of movement of trains to connections over the entire area. It is probably one of the outstanding points in the country for easy physical coordination and large results, and has abundant facilities for combined operation, other than space in freight houses and roundhouses. Limitations of these latter can be overcome at reasonable cost. Two of the large classification yards would accommodate all the traffic now moving, and the three are in such proximity that reciprocal operation with easy connections, supplemented by the Toledo Terminal, make them almost the same as three large units in one yard. All lake coal can be accommodated in the Chesapeake & Ohio yard and dumped at C. & O. docks, which have recently been expanded, leaving the other major units free for expeditious handling of city and through traffic. There would then be in each unit less to handle than was assigned to Gardenville Yard by the Buffalo committee, composed of representatives of many of the same lines and with whose conclusions we are in general accord.

Your Director, while in Toledo, at 10:30 A.M. saw a cut prepared to leave one of the south-side yards, and was at a north-side yard, some 15 miles distant, at 2:00 P.M. when this cut arrived for delivery to a connecting line. By coordinating the terminals and pooling the operation of all traffic over a four-track line composed of the Michigan Central and the Detroit & Toledo Shore Line, the volume of traffic in the concentrated arrangement would easily have afforded a train leaving with sufficient loading at 10:30 A.M. and reaching Windsor, Canada, in about the same time as now required to reach the connecting line at the north-side yard. By such operation much expense would be saved, not only at Toledo, but also at Detroit by going to the Tunnel Yard direct instead of to four or five separate Detroit yards, to be further switched at each. The traffic could be dispatched from Detroit, Windsor or Port Huron on the same day, instead of 12 to 24 hours later, under present methods.

DETROIT

The report of the terminal committee on the survey of coordination of facilities and services at Detroit indicates possible savings of $657,853, largely predicated upon joint use of the Michigan Central passenger station by all lines and abandonment of the river transfer for handling rail traffic, diverting it through the Michigan Central tunnel to Windsor. This saving is tempered by a proposed expenditure of $500,000 and carrying charges of $25,000 a year, for a new coach yard, notwithstanding the present Michigan Central facilities have in the past handled and serviced a greater number of passenger cars than all the lines are handling in and out of Detroit at the present time. No doubt a new passenger coach yard, equipped with modern facilities, would facilitate the handling of equipment and effect some economies, but it is hardly required now to enable joint use of the Michigan Central station. By installing a completely coordinated use of facilities and services of all rail lines at Detroit and controlling the flow of traffic into the area from Windsor as proposed, and from Toledo as we suggest, the estimated savings of $657,000, found practicable by the committee, can be amplified by some $1,350,000 per annum, making the total amount of economies under such an arrangement some $2,000,000, with actual improvement in service.

INDIANAPOLIS

A committee composed of railroad officers made a survey and reported possible savings of $270,000 per annum. Representatives of your regional staff reviewed this report on the ground with members of the local committee and submitted details indicating how the savings could be amplified to some $400,000. Your Director also went over this terminal with the committee. Considering the physical characteristics, volume of business, and number of separate operations engaged in, a gross saving of approximately $550,000 per annum is feasible from coordination at Indianapolis, calculated on basis of similar coordinated operations elsewhere, or about twice the committee's estimate. This point was selected by the Coordinator as a test point for the Eastern Region, and the carriers were requested to appoint responsible officers to confer and agree upon a plan for putting the coordinated arrangement into effect, or to show specifically why each line was unwilling to agree to such a plan. So far no reply has been received from the Eastern Regional Coordinating Committee, as to what the interested lines propose to do or not to do, and why. Your Director conferred with the Operating Committee of responsible officers and was advised the committee would proceed to work out a plan and make effective all economies practicable. Advice from the Executive Secretary of the Coordinating Committee reveals that nothing definite has yet been accomplished after a lapse of some 11 months.

NEW YORK

A survey of possibilities under coordination was made at New York by a committee of officers of interested lines and transmitted to the Chairman of the Regional Operating Committee on May 31, 1934. We were furnished with a copy of the report, but it has not yet been officially submitted by the Coordinating Committee of the Eastern Region.

Estimated savings were indicated of $1,836,644 per annum under joint or coordinated operation. From the basis upon which the situation was considered, the estimate is a close approximation of the economies possible. Obviously the survey was limited as to scope, and other than outlining the details of operation and rearrangements, the savings incident thereto were confined largely to pooling suburban passenger service of the Pennsylvania and Jersey Central between New York and Bay Head Junction, eliminating three ferry operations, seven piers and pier stations, and transferring the freight terminal operations of the Baltimore & Ohio from St. George to Communipaw and combining them with those of the Jersey Central. Savings in these major items are, respectively, as follows:

$ 159,000
$ 574,134
$ 689,572
$ 241,200

a total of $1,663,906. The remaining $172,658 is made up of more or less minor combinations, leaving major operations incident to freight terminals and facilities as they now exist.

The committee concludes that physical conditions, inconvenience, and impracticability of rearrangement, because the facilities of no one line can accommodate the entire traffic of any other line under peak conditions, preclude further economies. The topographical situation on Manhattan Island and the Jersey Shore does present difficulties. As at St. Louis, each line has projected its facilities up to edgewater and there constructed terminals to meet its requirements. It is apparent from the savings effected by elimination of a small number of units of harbor operation and facilities incident thereto that the handling of freight traffic in the New York terminal area is exceedingly costly. After the expensive floating performance, much of the l.c.l. traffic is then moved in so-called trap cars to transfer platforms at the outlying classification yards, rehandled, and forwarded to various sections of the country. As stated by President Loomis of the Lehigh Valley, floating operations in the harbor are equivalent to an easy method of terminal switching. Nevertheless they are an expensive substitute and one that is susceptible to economy in coordination and elimination the same as duplicate yard engine operations, and with greater economies in proportion to elimination. The elimination of float bridges and appurtenances would correspondingly reduce yard engine operation required to serve the large number of individual facilities of this character.

There seems to be little reason for failure to use Belt Line 13 and the Pennsylvania's transfer facilities to Bay Ridge now, or at least car floats of the other lines as well as those of the Pennsylvania should receive and deliver New Haven traffic at Bay Ridge, instead of utilizing the long water transfer from the Jersey shore to Oak Point. It is either cheaper to deliver at Bay Ridge and complete delivery by rail, or cheaper to float cars all the way to Oak Point. If the first-mentioned arrangement is more economical, it should be used by all the Jersey lines. If the second, or long distance floating, is the cheaper method, it should be used by all lines. The facilities at Bay Ridge are ample.

In 1926 the Port of New York Authority, with a committee of railroad executives, made a joint study of the cost of carfloat, lighterage, and other operations in the New York harbor district, and issued a report indicating an annual saving of $2,396,000 by rearrangement and elimination of units engaged in such operations. Under date of August 19, 1933, the Port of New York Authority gave a memorandum to Regional Director German of your staff, to be considered in connection with coordination possibilities in the New York terminal area. Mr. German, in submitting his report at the end of 1933, laid particular stress upon the possibilities outlined by the Port Authority. The situation was further studied by Regional Director Temple, successor to Mr. German, and by his assistant, A. R. Pelnar. Both of them reached much the same general conclusions.

In the joint report of the Port Authority and the railroad executives, it was proposed to rearrange and modernize the handling of the l.c.l. traffic which constitutes a large proportion of the import and export movement, as well as the assembly and distribution of similar local traffic to and from the area, on both Manhattan and the Jersey Shore, eliminating a large number of stations, making others joint, and handling the traffic by motor instead of rail switching. It further proposed to make large reductions in the number of pier stations on Manhattan, thus eliminating rentals, supervision, operation, maintenance, supplies, interest on investment, and other costs, with an estimated economy of $1,000,000 per annum. By concentration of traffic at union inland terminals (some of which are currently operated by independent lines), and substitution, for pier stations, of store-door delivery and pick-up by truck, it was estimated that a further economy of some $500,000 per annum could be realized. The full use of Belt Line 13 in making interchange between lines serving the entire Jersey waterfront, instead of resorting to lighterage operations, was proposed to save $1,200,000 additional per annum.

Some of these economies have since been secured. It was proposed to construct Belt Line 1, connecting with Belt Line 13, linking up the carriers on the Jersey side of North River to the Long Island Railroad at Bay Ridge by construction of a subaqueous tunnel across New York Bay. By this latter arrangement it was estimated an economy of $543,000 per annum could be secured. Including the subaqueous tunnel, which would require a large capital outlay, total annual savings estimated by rearrangement and coordination of facilities in the New York terminal area were $7,439,000. Deducting the $543,000 incident to the tunnel, leaves $6,896,000 saving by utilizing existing facilities to the greatest advantage.

The mayor of New York recently requested the Coordinator to ascertain the attitude of the railroads concerning the construction and use of the proposed tunnel under the North River. The request was referred to the Coordinating Committee for report. A report has been submitted indicating that the traffic is now only 55 per cent of that upon which the previous estimates were based. On present volume of traffic, the report states that no economies would result to the railroads from use of such a facility. Were volume restored to the 1929 level, economies resulting would appear to approximate the estimate of 1926. On the other hand it is apparent that under a coordinated operation, such as we suggest, by combining the facilities of the various lines, reducing the number of units employed as much as practicable, both as to land terminals and water facilities, and delivering all interchange traffic to the Long Island and New Haven roads at Bay Ridge, a material reduction in present costs would ensue. This would further reduce potential economies from use of a subaqueous tunnel.

Your Director in company with officers of all interested carriers went over the facilities in New York harbor and while not being able to check and confirm all of the estimates of the survey committee or of the Port of New York Authority, he is convinced that it is practicable to extend coordination and joint management in the New York terminal area beyond the limited proposals of the survey committee, with considerable increase in savings.

The position taken by the survey committee that no line's facilities would accommodate all of the traffic of another line under peak load would not seem to justify the conclusion that further coordination and economies are not now practicable. None of the coal-dumping facilities is operated to more than a fraction of its capacity. The same is true of other facilities. To contend that all should be operated on this partial basis instead of closing some and using the remainder to capacity, expanding in the event of demand, is to assume the same attitude as the committee at Phoenix, Arizona, that two engine houses should be operated in order that a standby house would be available in the event of fire.

Your Director is also in accord with the conclusions of the Port of New York Authority that by concentration of stations and the extension of pick-up and delivery service, now being furnished to some extent, substituting motor operation for outbound loading facilities in handling l.c.l. traffic, savings of consequence would accrue combined with improved service.

The committee's estimate of $1,836,344, when confined to the limited rearrangement proposed, is large, no doubt reasonably reflecting what could be saved in the operation of the plan. As has been indicated, the committee's estimate was confined largely to three particular activities, a major item being elimination of seven piers and pier stations. The Port Authority estimated that 25 of these piers could be released by the use of trucks, a method of handling which, according to the figures submitted by the Authority, is cheaper per-ton than the methods now used. The total savings estimated by the Authority amounted to $6,896,000 per annum, without the subaqueous tunnel, and were based upon a more extensive and exhaustive survey than that made by the carriers' committee.

It is quite evident that the opportunities for economies in terminal operations within the New York district would be considerably enlarged by the pooling of traffic to a certain extent before it reaches the terminal area. Such pooling was proposed on a very extensive scale in the so-called Prince Plan of railroad consolidations, later studied by a committee of carrier officers under the direction of Mr. Poland of your staff. These proposals notably involved the coal traffic from the anthracite and bituminous regions. Without actual merging of railroad systems, as was contemplated by this plan, and without going so far in the direction of pooling, your Director believes that it is possible to control the flow of traffic into the terminal area by application of the pooling principle to an extent which will not interfere with individuality of service but will reduce the waste in terminal handling very materially. The operations from the anthracite field particularly warrant study in this connection, and also the operations into the terminal area of the Pennsylvania, the Baltimore & Ohio, and the Jersey Central and those of the Erie, the Lackawanna, and the West Shore.

Your Director is of the opinion that the economies estimated by the carriers' committee can be more than doubled, along lines indicated by the Port Authority, even if attention is confined to the terminal area, and that they could conservatively be increased to as much as $7,500,000 or $10,000,000 by application of the pooling principle to some extent beyond the terminal area.

ST. JOSEPH

At St. Joseph, Missouri, where six railroads operate independent units, the carriers' committee could find no savings possible by coordinating facilities and services, with the exception of some minor joint arrangements between the Santa Fe and Union Pacific. There a union depot and a stock yards railroad owned by the Missouri Pacific are used by all lines. Three reports were made on the St. Joseph situation. The first two were completely negative, the third estimated that about $58,000 could be saved. Upon the basis of operation proposed, the latter findings approximate the savings that could be expected, but under complete coordination your staff estimated a possible saving of $232,000 per annum, with a capital expenditure of some $150,000 to expand train yard and engine house facilities of the Burlington to make ample provision for handling the business of all lines in one unit. The plan contemplated use by the Chicago Great Western of the Burlington line through St. Joseph, instead of the line of the Santa Fe.

Details of how these conclusions were reached were submitted to the Western Regional Coordinating Committee, except as to capital expenditures. The Executive Secretary of the Committee advised, under date of March 21, 1935, in part as follows:

> We referred your report to Mr. Budd of the C.B.& Q. and I am now enclosing copy of his report of March 15th in which he points out your study is based on test period, July 1933, and since 1933 reductions have been made by St. Joseph lines, bringing about elimination of 61 employees and a saving of $131,432.88 per annum.

This amount plus $58,000, or $189,432.88, is, as Mr. Budd states, somewhere near the possibilities, without the expansion of the Burlington facilities which we propose and the rerouting of Chicago Great Western trains. If the latter changes are made, our estimate is conservative and seems to be about in line with Mr. Budd's calculations.

DENVER

At Denver, Colorado, referred to in our progress report of February 17, 1935, the survey committee at first estimated possible savings at $144,072, requiring a capital expenditure of $2,000,000, and later changed this amount to

$298,202, with moderate capital expense. After analysis of the data and actual observations on the ground, your staff estimated annual savings of $683,256 possible under coordination at Denver, with little capital expense. Details of our estimate were submitted to the Regional Coordinating Committee and no exception has yet been taken to the findings. Your Director and his staff went over the Denver situation on the ground and are confident full coordination will save, in operating expenses, the amount estimated.

CASPER

A committee composed of General Managers of the Burlington and North Western lines conducted a survey and reported no savings obtainable by coordination. Review on the ground by your regional staff and analysis of the statistical data resulted in a saving of $99,507, estimated as possible under joint operation. Physical conditions are adaptable to such an arrangement. The economies can be increased without inconvenience to the public by joint use of main-line trackage and abandonment of one line. Trucks, as now used by many lines in the handling of live stock, can take care of the service required where the two lines are separated by any distance of consequence, which occurs at some points over the 90 miles involved.

PHOENIX

A committee of railroad operating and mechanical officers surveyed this terminal. The conclusion was that a loss of $4,500 per annum would be sustained if operations and facilities were jointly utilized. Your Director and Assistant Director visited Phoenix and reviewed the situation on the ground. Two lines only are involved - the Southern Pacific and the Santa Fe. Each independently operates all units of service required, except the passenger station, which is joint. It was said by the committee that under coordination, service would be curtailed and excessive delays would occur. The reasons for such adverse effects were not made plain. It was stated that movements over some 40 busy street crossings would be increased and separation of grades would be required. Our observation did not reveal that many crossings, and only a few that would be classed as busy. Concentration of activities in the Southern Pacific's downtown unit would avoid present double movement of Santa Fe engines and trains and thus reduce movement over the street crossings. It was stated that the Southern Pacific's engine house facilities could adequately accommodate Santa Fe engines at a pay roll saving of $943 per month, but that the extra mileage of Santa Fe engines would overcome this economy. We could not reconcile this statement with the facts. Further it was stated, in effect, that as long as there were engine house and repair units, it was best to operate them in order to have a stand-by unit available in case of fire. There was similar reasoning for operating two freight houses and station units. No physical restrictions are present other than the fact that all street intersections are at grade, but this condition has always been present without particularly restricting movement. Your staff estimates that coordination is practical and would result in approximate savings of $75,000 per annum instead of an increased expense of $4,500 as reported by the committee. There would be no impairment of service. Figures showing details of how these conclusions were reached were furnished the Coordinating Committee for further consideration and thus far no exception has been taken to them.

LOS ANGELES

A committee of interested lines made a survey and reported an annual saving possible under coordination of facilities and services of $425,178 per annum. While this is a considerable amount, only four lines being involved, it is our opinion that the amount shown is short some $250,000 of what can be conservatively anticipated if full coordination is made effective. The operation and service to the new Union Passenger Station under construction will change the terminal expense in some respects, but our conclusion is that savings greater than the committee estimated would result, even from the arrangement which the committee proposed. Precedents of accomplishment in similar situations reported to us justify this conclusion. We also believe that further economies and greater facility of operation would result from moving Southern Pacific freight traffic to and from the east over the Santa Fe into an expanded yard facility secured by combining the yards of the Santa Fe and Union Pacific, thus concentrating all the traffic from the east for Los Angeles and environs, including the ocean connections at San Pedro. This would permit classification and forwarding to industries, team tracks and other facilities, and to Long Beach and San Pedro, in one combined movement rather than two or more. Two yard units are necessary incidents to the heavy traffic of the Southern Pacific from the north; also to the large industrial area adjacent to the Southern Pacific yards.

FRESNO, STOCKTON, BAKERSFIELD

Survey committees composed of superintendents and subordinate officers made report on each of these points, estimating savings in operating expense as follows:

Fresno	$ 20,790
Stockton	$ 67,945
Bakersfield	$143,096

Later, the operating vice-presidents took exceptions to the findings, filing objections. Fresno and Stockton were resurveyed and sufficient obstacles were reported to overcome the estimated economies. Capital expenditure of $131,600 was proposed at Fresno, as being a necessary incident of a unified arrangement, and an expense account was provided for automobile operation by the yardmaster and the agent to enable them to supervise the expanded arrangement. After visiting these points and having operations explained by local operators, your Director was impressed with the conservatism of the original conclusions of the survey committees. The reports were clear and in detail.

Going beyond these reports, obviously the logical method to pursue to realize economies in this area is to pool operations from Mojave to San Francisco and Oakland, utilizing all facilities to the greatest advantage. The area is highly productive of fruits and vegetables requiring the best of service and is likewise highly competitive as between the Southern Pacific and the Santa Fe, with the Western Pacific an additional competitive factor in the northern portion of the San Joaquin and Sacramento Valleys and at Oakland and San Francisco. Your Director suggested such pooling of operations for certain lines, but none of the railroads was disposed to do anything that might weaken its competitive position. This disposition is justified, if it is clear that actual loss or impairment of position would result. On the other hand, these rival railroad operations are in such close proximity through this entire area that there appears to be a great opportunity to effect economies of consequence without impairment of service, exceeding in amount the estimate for such an arrangement proposed between Portland, Oregon, and Vancouver, B.C. It would also increase to a considerable degree the estimated economies at San Francisco and Oakland, as well as at all intermediate terminals. The traffic would be together as it arrived at these terminals and could be handled in joint facilities, thereby reducing three operations of car ferries to one, at the same time affording greater frequency of service to the public. Absorption of trucking expense will doubtless prevail in this area in the near future as it does now in the livestock area, and competition will gravitate to a contest between solicitors and service agents. There are many peculiarities incident to the handling and servicing of this traffic with which the serving lines are familiar and which they have to meet, and their experience prompts them to be skeptical of innovations of the character proposed or of any other innovation that would tend to disrupt present arrangements, which they regard as generally satisfactory. The economies from such a pooled operating arrangement are possible of attainment and would be important, but whether justified under the conditions existing is a matter for the interested lines to determine.

CHICAGO

Our progress report of February 14, 1935, outlined the Chicago situation in detail. Field work has been completed and the report is now being compiled. It is estimated that an annual saving of $7,500,000 can be realized by a coordination arrangement. Your Director from his knowledge of the Chicago situation considers the amount ultra-conservative. The zoning assignment and projected plan of operation have been made by men familiar with the Chicago terminal problem and with successful operation of large terminal units as part of their long practical experience. The survey and estimate are separated as to passenger and freight facilities and service.

Six downtown passenger stations are operated in Chicago. The survey committee in its first effort eliminated one unit, reducing the number to five. In a second effort two units were eliminated, reducing the number from six to four. From this rearrangement is estimated an annual saving of $52,023. This is probably a reasonable estimate upon the basis proposed. Such basis was determined for the survey committee by the interested lines.

The railroad passenger terminal situation in Chicago has been under consideration over a period of many years. John F. Wallace, a prominent engineer, for many years with the Illinois Central Railroad and later Chief Engineer of the Panama Canal Commission, was employed in 1914 by the City of Chicago to head a commission to make a comprehensive survey of the railroad passenger terminals of the city, and subsequently submitted a report with recommendations to the Board of Aldermen. The substance of the conclusions and recommendations of Mr. Wallace and his associates was that two new terminals should be constructed to take the place of those then existing. One of these has since been completed, the present Union Station, but no definite action has yet been taken upon the proposed Illinois Central station, to be used jointly by certain other roads. Straightening of the Chicago River between Van Buren and 16th streets, a complement to the plan, was completed several years ago.

Our purpose in referring to this report of the Chicago Railway Terminal Commission, of which Mr. Wallace was Chairman, is that it provided for closing Grand Central, LaSalle and Dearborn stations and diverting the lines using these facilities to the proposed Lake Front station to be constructed by the Illinois Central. By development of these two units, the Union Station, now in service, and the proposed Lake Front station, and straightening of the Chicago River, it was stated that there could be released for commercial development large areas of valuable space then valued at $20 per square foot, the total valuation being $60,000,000. By concentrating freight house and team track operations west of the Chicago River and adjacent to the Wabash and Chicago & Eastern Illinois facilities at 26th Street, more than three times the area proposed could now be released for city and commercial development. There is little demand for such space at the present time and its value remains for normal conditions to reveal. We merely stress the feasibility of the release and the improvement incident thereto in handling both freight and passenger traffic with less operating cost.

The Warfield survey and plan for unifying terminal facilities and operations in Chicago, completed in 1922, took no exception to the Commission's plan for passenger terminal and operations, adopting its findings as logical and proper. In early 1923 a committee of railroad officers, of which J. J. Pelley was Chairman, checked and reported upon the Warfield plan and report. While taking exceptions to all the findings and recommendations with regard to freight facilities and operation, it concurred in the findings with regard to passenger terminals.

We have, therefore, a survey by the city, extending over a period of seven years with findings and recommendations to eliminate the LaSalle, Grand Central and Dearborn stations. These findings were approved by a committee composed of eminent engineers representing the Railway Investors and Security Owners' Association (known as the Warfield Committee), and were acquiesced in so far as economies are concerned by a committee of railroad officers headed by Mr. Pelley. Recently a City Engineer, Edward J. Noonan, submitted a report to the Aldermanic Committee reaching the same conclusions, with the exception that he recommends locating the Lake Front passenger terminal at Randolph Street instead of at 16th Street. Engineer Noonan estimated operating economies of $3,000,000 per annum by elimination of loop stations and use of the Lake Front station.

The present committee surveying the passenger terminal situation for the Coordinating Committee recommends closing Dearborn and Grand Central stations but retaining the LaSalle station, dividing the Grand Central and Dearborn occupants among the other units. It estimates that a saving of $52,023 per annum can be secured by such an arrangement. Added to this is $303,836 saving in mechanical expense incident to passenger operations. However, taking into consideration the report of Mr. Wallace, approved by the Warfield committee and concurred in by the Pelley committee, and further supplemented and brought down to date by Mr. Noonan for the Aldermanic Committee, we do not believe that the report now under consideration on coordination of passenger terminals and their operation is either representative of the proper arrangement or of the savings to be secured if coordination is developed to the extent of practical possibilities. So much time of highly skilled men has been devoted to this study, all reaching the same general conclusion, that we are impressed with the practicability of the arrangement which they proposed and its economic as well as civic possibilities.

Your staff has given such attention and consideration to this matter as time and forces would permit, and is convinced that the present arrangement is wasteful and inordinately expensive in operation; also that coordination as outlined by the recent survey committee would improve the situation but slightly and at best be only a partial measure. We are not in position to verify the savings estimated by Mr. Noonan, though by request and agreement with the lines he was furnished substantially the same data as used by the survey committee and upon these his conclusions are predicated. If such economies in operation are possible as Mr. Noonan estimates, the total amount of savings estimated from coordination would be increased from $7,500,000 to roundly $10,000,000. Your staff is going further into the practicability and desirability of Randolph Street as a location for a Lake Front passenger terminal and at the same time is reviewing the operating arrangement proposed so as to reach a conclusion as to its feasibility and the savings that would result.

Coordination of freight terminal operations would result, according to the survey committee, in an estimated saving of $7,043,000. Conclusions are based upon present performance compared with the cost of a proposed unified plan of facilities and services. Due regard has been given to maintaining service by each line the same as or better than that now rendered, meeting the individual lines' schedules and service requirements. The estimate of savings is considerably less than that of the Warfield committee, but is based on a considerably lower volume of business. Also much less capital expenditure is involved.

The Warfield survey and estimate were based upon car-mile cost computations. A unit based on switch engine hours, used by the survey committee, is far more representative of the cost of yard performance together with service units required incident thereto. Concentration to capacity of facilities and limiting the number utilized, instead of many units used to partial capacity, is also reflective of proper economies.

No savings incident to per-diem payments were taken into account by the survey committee. It appears that such payments would be decreased materially under the proposed terminal plan. In the Warfield report, $4,895,000 saving in per-diem was estimated. From one point of view, per-diem saving is a mere matter of inter-company bookkeeping, what one company saves being lost to another. There is, however, actual economy in overhead or capital expense from acceleration of car movement, in addition to direct gain in operating expense.

The savings estimated by the survey committee are not relatively as great as reflected in some estimates and appear low considering the abundance of facilities and the main-track connections between them. The topographical layout is easy. Traffic to and from the loop district is so concentrated and congested that it led to construction of major classification facilities beyond the city limits, interchange traffic moving via belt lines and loop district traffic by transfer switch runs. The differences in location of the outside classification yards, some being separated as much as 40 miles, in considerable measure restrict the elimination of interchange switching and transfers necessary to produce the maximum results. Traffic of the Milwaukee and the North Western should logically go into the same classification yard as traffic of the New York Central, Pennsylvania and other eastern lines. The wide separation of the present road terminals and operating arrangements and agreements related thereto prevent this particular assignment and make it necessary to work out other methods of joint handling to produce the best results practical of attainment. If and when the area is fully coordinated, many adjustments will be made possible. Estimated on the basis of meeting present conditions in the general manner set forth in the current survey, and taking into consideration amplification of economies in the passenger terminal rearrangement and operation, to which we are now giving consideration, $10,000,000 is a conservative estimate of the savings that would accrue, and in our opinion such savings are practical of attainment.

LOUISVILLE

Based on June, 1934, 30,040 cars are interchanged betwee the carriers monthly at Louisville, or 35 percent of the total car received and forwarded. A considerable portion of the time of yar engines is spent in marshalling interchange cuts and transferring them from line to line and reswitching them after receipt, much of which time could be eliminated by utilizing a lesser number of operating units. It is stated that no one facility is capable of accommodating any other line, thus preventing coordination. The large facilities of the Louisville & Nashville in the yard now operated in South Louisville, plus the adjacent Mapother Yard, with moderate adjustments, would accommodate all traffic in and out of Louisville at this time with allowance for reasonable increase. Seventeen hundred cars each way daily is no great load for a yard of 3,936 cars capacity, properly arranged. North-side lines' trains can easily get to these yards, eliminating entirely yard transfer movements. The same easy access is afforded the Southern and Illinois Central. The Chesapeake & Ohio handles little traffic and can be provided for in the L. & N. downtown unit. At most, only two units should be in operation - those of the Kentucky & Indiana Terminal and of the Louisville & Nashville. Calculated on a reduction to this number of units, a conservative estimate of possible savings approximates $500,000 per annum, upon the present flow of traffic, with accelerated and improved service. This compares with no savings considered possible by the survey committee.

MEMPHIS

A survey committee reported a possible saving of $281,619. Your regional staff amplified this estimated saving to $435,715. Meeting with the survey committee, your Director and regional staff took exception to the amount of savings estimated. Under proper coordination, the economy possibilities here are considerable more than twice the committee's estimate. Your Director estimates, on present traffic level, that the savings possible approximate $700,000 per annum. After receiving his report, all lines except the Illinois Central took exception to the findings, both as to the savings estimated and as to service under the coordinated arrangement. Not only is the larger saving possible, but service will be materially improved.

CHATTANOOGA

The survey committee reported an estimated saving of $104,777 per annum under coordination of services and facilities. Your regional staff amplified the amount to $203,916. An investigation on the ground by your Director and a member of the regional staff developed that the Southern Railway's facilities are more than ample to accommodate the operations of the two other lines, and that under such a joint arrangement the annual saving should approximate $425,000. The Southern at one time operated several independent units, combined all into one by an enlarged facility, and secured large savings. Its facilities are not only adequate for accommodation of the two other lines but are easily accessible. By pooling the operation of merchandise traffic between Chattanooga and Memphis and Atlanta, additional economies would result.

RICHMOND

The survey committee reported no savings practicable. Analysis of the report with members of the committee on the ground convinced your Director that services and facilities of all the lines, despite physical problems, are susceptible of pooling to an extent that economy of considerable proportions is attainable. Lines can be jointly used and operations re-arranged without disturbing adequate service to the public. Through movements will be expedited. The committee is engaged in a resurvey and if full possibilities are set forth, a saving in operating expenses approximating $250,000 per annum should be found possible under a fully coordinated arrangement. This amount might be moderately increased or decreased, but your Director is confident that it is approximately correct.

CHARLESTON AND SAVANNAH

The survey committees at these points reported no economies possible. Your regional staff after analysis and review reported $101,285 at Charleston and $80,788 at Savannah. It is the opinion of your Director, after going into the matter on the ground with the regional staff and roads' representatives, that these estimates can be further amplified; at Charleston by use of Coast Lines' facilities to maximum by all lines, and at Savannah by the use of the Seaboard's yard and engine terminal, which can be expanded if necessary to accommodate all needs, pooling port and waterfront facilities for all lines, using those of the Central of Georgia to capacity and others as accessories, and operating Seaboard freight trains over Coast Line double track between Charleston and Savannah. Such arrangements worked out to maximum possibilities would more than double the savings shown as possible by conservative estimates of a staff representative, although no savings were found to be possible by the committees.

JACKSONVILLE

The same applies at Jacksonville, where your Director and the regional staff and representatives of the roads observed the situation on the ground. The train yard of the Coast Line can adequately accommodate all the traffic, using the Seaboard yard and facilities for storage and repairs to Fruit Growers Express refrigerator cars and conducting all car repair activities except running repairs on repair tracks accessorial to the train yard of the Coast Line. This would eliminate the delay and most of the expense of the 14-mile interchange between the Florida East Coast and the other lines both for through ahd local traffic, and also eliminate duplicate industrial moves by each line. The savings would thus be increased to approximately $450,000 per annum with considerably improved service.

NEW ORLEANS

At New Orleans, a member of the regional staff participated in the survey, concurring in the findings set forth in the committee's report because no different arrangement or result could be agreed upon by the whole committee. The amount of $378,951, estimated as a possible saving, can be amplified to somewhere near twice this figure, or to approximately $750,000. The findings of this committee were restricted by the uncertainty of method of operation of west-side lines upon completion of the bridge across the Mississippi River now under construction and, incident to this, the uncertainty whether provision for a large classification yard north of New Orleans along the Illinois Central near the east end of the bridge should be made to accommodate traffic of all west-side and north-side lines. The conservative course was taken and the estimate of economies restricted accordingly. There is no criticism of the committee's position in this regard.

The New Orleans Public Belt owned by the municipality is now constructing a line paralleling the Illinois Central's tracks out to a point where it turns west to connect with the bridge and west-side lines. There might be some necessity, because of the bridge construction, for expanding the facilities of the Illinois Central somewhat and providing for joint use by the Belt, but there seems little justification for the duplication of facilities and duplicate operation that will follow the construction of a separate parallel line.

Indicating how the conclusion was reached that estimated savings can be materially increased, the present facilities can be jointly used to a greater extent than proposed with savings enhanced even in greater proportion. During November, 1934, based on a test day's business, 30,600 cars were received and 30,810 cars forwarded, while 109,080 cars, or 75 percent more than were received and forwarded to and from the terminal, were handled in interchange. Obviously this shuffling and shuttling of cars caused great expense and consumed much time. Considering the physical layout, volume of traffic and present operating expenses, the possibilities here are comparable with those reported at Omaha and go beyond the actual savings of the New York Central at Toledo. A large amount of the traffic to and from the terminal area is import and export movement largely served by the Public Belt, and individual operation has little, if any, influence upon the division of traffic between lines. The cost of handling in the terminal, when reduced to a loaded car-mile basis by dividing the number of car-miles into reported operating costs other than maintenance of way, is greater than the cost per loaded car-mile of movement from Memphis, Houston, or Birmingham to New Orleans.

ATLANTA

A survey committee made a report on April 27, 1934. In this report the committee found that no savings were obtainable under practical coordination. Your regional director took exception to the conclusion and the basis upon which findings were predicated. Further investigation was made and a supplemental report issued. In the supplement, the committee estimated that savings of $361,675 would be made possible by a capital expenditure of $1,597,000, at the same time registering a vigorous protest as to the basis of the survey. Investigation on the ground with regional forces and analysis of the details of operation, as set forth in the survey, leads your staff to conclude that the arrangement could be installed with much less capital expenditure, in fact the greater portion of the savings could be realized with a capital outlay, necessary to make proper connections, minor additions, etc., which would ne relatively small. Also we are convinced that the savings estimated in the supplement can be considerably amplified, taking into account the size of operation, volume of traffic, units involved, capacity of facilities, and adaptable physical conditions. Coordination pursued to its full possibilities at Atlanta would result in economies of about twice the amount estimated by the committee. This estimate of your staff is about on a relative parity with the estimates made by representatives of the same lines at Montgomery. Elimination of duplicated effort, long transfer, etc. and reciprocal switching delays now occurring will correspondingly accelerate traffic movement.

BIRMINGHAM

The terminal area at this point was surveyed by a committee of superintendents and junior officers of interested roads in about the same manner as was pursued at New Orleans. The conclusion of the committee was that by coordinating facilities and operations in the Birmingham area a saving of $446,680 could be secured based upon present methods of operation. Here, as at New Orleans, your regional staff concurred for the purpose of reaching an agreement with the committee. In the opinion of your Director, the estimate is highly conservative. Considering the physical layout, volume of traffic and facilities, it is his opinion that the estimate of the surveying committee could be amplified to some $750,000 per annum.

Since here, as elsewhere, the survey committee disregarded property rights, labor and other restrictions, for the purpose of estimating the savings physically possible, the Coordinator, in his letter of July 17, 1934 (see Appendix B), requested the Southern Regional Coordinating Committee to have responsible officers of interested lines undertake to work out a plan to put the proposed coordinating arrangement into effect or to say definitely why it could not be done.

Under date of April 22, 1935, a six-page report, with appendix, compiled by general superintendents and Assistant general managers of interested lines, was transmitted to the Coordinator by the Executive Secretary of the Southern Regional Coordinating Committee without comment either of the executives of the interested lines or of the Coordinating Committee. This supposedly is a reply to your request of July 17, 1934, upon the Coordinating Committee for a plan to put the proposed arrangement into effect, or specific reasons why each individual line would not agree. Obviously the report is not a response to your request and under the circumstances of submission could hardly be understood as having had authoritative consideration.

In substance the conclusions of this special committee of responsible officers are as follows:

Savings were over-estimated by the survey committee to the extent of $411,137. It is said that switching and yard force savings are overstated to the extent of $164,888, although no substantiating data are submitted. The committee seems to have arbitrarily reduced the estimated savings in switch engine units by half. The survey committee was composed of superintendents and subordinate officers, who have direct charge of switch engines at Birmingham and are familiar with, and resposible for, their operations. They should be in a better position to pass upon the possibilities in this respect than the representatives composing the super-committee, and if they are not capable of doing so, then it seems strange that they occupy these assignments under the members of the super-committee.

Exception is taken to the unit cost of $7.20 per switch engine hour used by the survey committee, and this unit measure is arbitrarily reduced to $6.00 per hour. In this connection, attention is called to the recent decision in Reciprocal Switching at Mobile, Ala., 206 I.C.C. 151, at the hearing of which special cost experts of the Louisville & Nashville and Southern, two of the interested Birmingham lines, testified. The expert of the Southern computed average cost at $9.10 per switch engine hour and the expert of the Louisville & Nashville placed it at $7.76. Furthermore in Switching Charges at Floydada, Tex., 206 I.C.C. 671, a cost of $11.98 per switch engine hour was approved. In Ex Parte 104, Part II, Practices Affecting Operating Revenues and Expenses, C. L. Mitchell of the Southern Railway read into the record detail cost figures on terminal switching at Birmingham and Chattanooga which showed the cost per switch engine hour to be $10.94 for a 6-wheel switcher and $11.10 for an 8-wheel, - these figures not including general repair costs or general expenses or investment charges. In another submission in the same hearing a figure was introduced to show the average cost at 15 selected yards, varying according to the locomotive type from $8.55 to $10.16 per switch engine hour, and this was said to include only "out-of-pocket" costs. Either the cost experts of these lines appearing before the Commission in these cases referred to, and testifying under oath, mis-stated the cost of switch engine hours or the members of the super-committee are not sufficiently informed on cost accounting to justify them in making representations on this item of expense or in arbitrarily insisting upon figures so far out of proportion to those of the other experts.

The arbitrary reduction of $32,272 in the survey committee's estimate on coordination of freight stations seems to be a matter of difference of opinion between the two committees, and a capital expenditure of $165,000 which the super-committee says would be required to permit Seaboard engines to operate into East Thomas yard is not detailed or explained in any way. The survey committee, - thoroughly familiar with the requirements in this respect - finds no necessity for an expenditure of this character. Further exception is taken by the super-committee to the survey committee's report on accounting and other requirements. The former claims that added accounting forces would have to be provided, at an estimated expense of $217,321. It is stated, therefore, that the survey committee underestimated these requirements to the extent of $190,721 per annum. Obviously the same forces as are now engaged in this particular work for all of the lines would be assigned to render the same service in a joint arrangement, with a reduction in personnel and expense. This has without exception been the result in all coordinated or merged terminal arrangements.

Reduction of the estimate by $411,137 seems to have been arbitrary on the part of the super-committee, and there appears little, if anything, to justify its conclusions.

The super-committee further states:

> That, probably, no better scheme could be devised for retarding the handling of traffic, deteriorating the service rendered, * * * * and diverting freight from the rails to the highway, than the one to zone the territory, as contemplated by the report of the general committee.
>
> The traffic moves in high speed, through freight trains, and for those lines to surrender the continuity of supervision and handling of that traffic by putting it through a terminal under independent supervision as here proposed is unthinkable.

Following this, the remainder of the report is largely devoted to quoting a letter from the General Manager of the Atlanta, Birmingham & Coast as to the adverse effect coordination of terminal facilities at Birmingham would have on that line.

As for the Atlanta, Birmingham & Coast, it handles 3 per cent of the cars in and out of Birmingham, operates two freight trains each way daily, with an average of 30 cars, nearly half of which are empty. In the month of November, 1932, the A. B. & C. delivered 1,555 cars to connections and received 1,551, from connections, a total of 3,106. Approximately 85 per cent of the total cars handled by this line are received and delivered in interchange. To operate this line into the L. & N. facilities as proposed could be done with practically no additional expense to the L. & N. This applies to the two switch engines, freight house operations, and mechanical operations, both locomotive and car, and would merely be assigning this work to another member of the family, as both railroads are controlled by the Atlantic Coast Line. The small amount of l.c.l. traffic handled by the A. B. & C. is more expensive to truck to and from its remote facilities than to and from the L. & N. facilities. The expense of such trucking of light loads to and from its poorly located facilities no doubt tends to keep a considerable amount of the l.c.l. traffic on the highways instead of on the A. B. & C. railroad.

The further conclusion that it is "unthinkable" than an independent terminal organization should be allowed to handle this high speed traffic for all lines seems to be refuted by the fact that three of the lines whose representatives subscribed to this report, the Central of Georgia, Illinois Central, and Frisco, now conduct just such a joint arrangement in the Birmingham terminal area. The Southern Railway participates in a comparable arrangement at Louisville, which handles some of the traffic that passes through Birmingham. This Kentucky & Indiana Terminal at Louisville has complete charge of and handles all of the operating functions, even to the extent of train yard work between two divisions of the Southern. Four of the Birmingham lines turn over most of their activities at St. Louis to the Terminal Railroad Association. The A. B. & C. Railroad does not participate in any similar arrangement that we know of, but as indicated, its traffic is small in volume and its position under the arrangement proposed would be decidedly improved. The Seaboard operates few joint arrangements of consequence, and like the A. B. & C. would probably be better off if it did.

Illustrating the effect that such a coordinated operation of terminal facilities at Birmingham would have upon this high-speed through traffic, let us trace the movement of a car of oranges originating on the East Coast in Florida, arriving at Birmingham over the Seaboard, and destined to Winnipeg. The train moving this car pulls into the Seaboard classification yard at Birmingham, where all cars are switched, inspected, carded, and classified. Then a transfer engine takes this car, either along or associated with other cars, in a special move to the yards of the Southern Railway, where the cut is received in the same manner as an inbound train, being inspected, carded, and then switched into classifications, the car of oranges being assigned to the proper train to be forwarded to Louisville. At Louisville, it goes into the joint yard of the Kentucky & Indiana Terminal, where the Southern loses control and the terminal organization inspects, cards, switches and makes up this car with others into an outbound Southern train with joint employees that handle cars concurrently for the Baltimore & Ohio and Monon. The operations are much simpler and are conducted with less expense than at Birmingham. This particular car can move to St. Louis on the Southern, where it is delivered to another joint terminal arrangement for delivery to the Wabash, which moves it to Des Moines. There it is handled by another joint terminal arrangement, and moves out over the Chicago Great Western to the Minnesota Transfer, another joint terminal arrangement. Thence it moves to Winnipeg over the Great Northern. In the course of its journey it has passed through four "unthinkable" arrangements with no apparent effect upon the good-will or going concern value of any of the lines involved. Obviously the produce dealer in Winnipeg does not know or care whether it was supervised individually or collectively at Birmingham. It could move out of the joint Kentucky & Indiana Terminal yard with equal freedom over the Baltimore & Ohio to Cleveland or over the Monon to Chicago. It would be a most difficult problem to ascertain where any benefit accrued to the Seaboard incident to switching this car of oranges in its own yard, with its own switch engine, housing the engine in its own house, cleaning its fire with its own cinderpit men, coaling from its own coal chute, inspecting and carding with its own inspectors, checking with its own yard clerk, and reconsigning with its own reconsigning clerk, or to the Southern Railway in the same character of handling.

It would be equally difficult to ascertain how the Southern Railway was adversely affected in any manner by running its train into the Kentucky & Indiana Terminal Yards at Louisville, where it has no individual forces or facilities of any kind for operating purposes but relinquishes all responsibility for further handling and forwarding to the joint forces of the Kentucky & Indiana Terminal, under a joint management headed by a Vice-President and General Manager, which terminal performs concurrently the same service for the Baltimore & Ohio and Monon. On the other hand, it would be relatively simple to ascertain the increase in expense in operation by independent procedure on part of the Seaboard and Southern at Birmingham as compared with the joint arrangement at Louisville, particularly the greater time consumed by the former compared with the latter.

Obviously the report of the super-committee is not a response of any value to the request of the Coordinator upon the management of interested lines as conveyed in his letter of July 17, 1934. Neither would it appear to have any particular value of a critical nature in its exceptions to the survey committee's findings. It merely conveys the impression of an effort to maintain and continue the present individual methods of operation at Birmingham and to insist that no other arrangement is more economical. Naturally, to concede economy would weaken the basis of contention for individual operation. The figures and statements made by the super-committee in this respect, stressing the importance of individual operation, appear particularly to lose importance in the light of the fact that the lines represented by these officers participate in joint arrangements at Birmingham, Louisville, St. Louis, Des Moines and other places.

PUTTING THE PLANS INTO EFFECT.

Conditions incident to making effective coordinating arrangements of sizeable proportions may require beginning upon a moderate scale, expanding as experience dictates to cover related activities until the field is sufficiently covered for realization of the savings possible and perfecting of service. We have had tentative contracts and agreements drafted, by way of models, with a view of submitting them for consideration as indicative of a reasonable procedure. A Legal Committee worked out a tentative plan for Kansas City, another is being worked out for the Twin Cities. Your organization endeavored to work out a procedure that would be generally applicable, with appropriate modifications.

Since each project presents a separate and individual problem, including specific interests, property, personnel, etc., it clearly necessistates an arrangement for each point which will meet the immediate and particular situation presented. These are matters for negotiation by the officers of the roads involved at each point.

We suggested to the Kansas City Lines that they begin by establishing an arrangement for pooling all switching in the terminal area, and then as the operation became adjusted and complete, gradually extend it to engine house and car repair and inspection units, thus expanding until all related operations were blended into a jointly operated terminal. An association established for the purpose, equally participated in by all lines, could make necessary leasing or other arrangements and establish personnel requirements, utilizing forces on a proper participation basis. There should be no great difficulty in working out operating arrangements somewhat along these lines that would yield the major portion of benefits to be derived from coordination.

SUMMARY.

It would seem proper to conclude from the discussion of particular and typical situations in this appendix that the opportunities for economy through coordination of terminal facilities are considerably greater than the carriers are often inclined to report, that there are seldom insurmountable obstacles in the way of the realization of these opportunities, and that many of the objections which the carriers have voiced in various instances arise out of a desire, conscious or unconscious, to perpetuate arrangements in effect over long periods of time.

Separate performance by individual lines of all phases of terminal operations is obsolete, as to both cost and service results. Pooled operations will often permit of greater flexibility and frequency of service, as well as reduce costs and avoid the need for duplicate facilities requiring capital outlay. Control and management of many terminal operations by individual railroads is clearly wasteful, impedes the free flow of traffic, and has no "good-will" value of consequence in the relations of railroads to their patrons. The advantages of coordination, however, can be secured without making it complete. Particular services or areas can often be reserved to individual lines, preventing or minimizing duplications through general supervision by the pool management.

Judging by the reports of the survey committees, the common tendency to adhere to present practice does not spring from lack of knowledge of the economies which coordination would make possible. In general they realize the opportunities. It seems to be the product of fear that the position or prestige of individual lines would be impaired. Each railroad feels that it can conduct its own affiars better than any coordinated management. If personnel is relinquished to a separate terminal organization, the fear is that there will be a loss in esprit de corps and in the enthusiasm and initiative of employees. There is a corresponding belief that "good-will" of shippers and traffic gains are created by individuality of service and direct contacts without any terminal organization as an intermediary.

These fears and beliefs are not without reason. The error lies in projecting them beyond the scope of reasonable application. Many of the mechanical and other operations in the terminal district, such as the operation of cinder pits or coal chutes, transfer switching, classifications, etc., have no bearing on relations with shippers, except as they influence the service which shippers receive. The latter have no direct knowledge of or contact with such operations, and so far as service is concerned, the elimination of wastes will in most instances also eliminate or reduce time consumed and delays. No one who faithfully explores the maze of classifications and transfers and unnecessary movements which are involved in individual railroad operations within a large terminal district can have any doubt on this point.

A joint management in which all the lines are equally interested, employing adequate forces and conducting many appropriate operations within the terminal area, can be made to perform with such increased efficiency, as compared with the efficiency of diverse operations by individual lines, that the service to the public will be improved with an enhancement of "good-will" value to all the participating carriers.

APPENDIX B

November 20, 1933.

TO THE REGIONAL COORDINATING COMMITTEES:

At my conference with the Committees on November 9, the question was discussed as to the extent to which studies of economies to be realized through unification of terminals, joint use of facilities, pooling of traffic or service, and the like should be carried. On September 14 I addressed a letter to the Western Regional Coordinating Committees, through Mr. Taylor, on this general subject which read in part as follows:

> When I was in Chicago last week I had the pleasure of conferring with Messrs. Budd and Scandrett of the Committee, and also with you. As I then indicated, I believe that it would be most unfortunate if the complications caused by the labor restrictions in the Act should result in any let-down or lack of diligence on the part of the carrier committees which are engaged in the work of searching out economies in operation possible through cooperative carrier effort. While circumstances and present legal limitations may prevent the immediate accomplishment of many of these economies, I am thoroughly persuaded that knowledge of what is possible in this direction will ultimately prove of very practical benefit. The future outlook for the railroads is such that it cannot be otherwise.
>
> The question came up at my Chicago conference as to how far the investigation into these matters should be carried. The final stage preceding actual accomplishment of any economy project involving two or more carriers would, of course, be negotiations over various terms and conditions which it might be necessary for the carriers to agree upon. In many instances such negotiations might consume much time of important railroad officials, and the question presented was whether I regard it as essential that they should be carried on up to the point

> of reaching definite agreements, in view of the fact that actual accomplishment of the projects may be indefinitely postponed.
>
> After considering this question, it seems to me that it is unnecessary for the present to carry the study of these projects up to the point of definite agreement upon terms and conditions. However, the study should be carried far enough so that it can be determined whether or not there is reasonable prospect that the project can be accomplished. There may be insuperable obstacles in the way, or there may be difficulties which are likely to yield to negotiations, or there may be no difficulties. The prospects ought to be analyzed to this general extent, but I can see no sufficient reason for conducting negotiations to the point of final agreement, at least where it is clear that the labor restrictions in the Act will for the present prevent consummation of the projects. Of course the study should also be sufficient to indicate the approximate savings which can probably be realized.

To make this matter still clearer, if possible, it is evident that in any such study there are two stages:

1. The determination of whether economies in operation are *physically possible*, and the probable amount thereof.

2. The determination of whether they are *practicable* in other respects.

The studies should certainly be progressed through the first stage, and report made accordingly. If economies are not physically possible, of course there is nothing more to report. If they are physically possible, then the second stage of the study begins.

In this second stage, it may be found that no difficulties exist in the way of agreement upon the part of the lines concerned. If so, this fact should be reported. It may, however, be found that there are difficulties, due to traffic considerations affecting individual lines, or to property rights which must be given up and for which there must be just compensation, or to other reasons. In this event, such difficulties may be overcome in two possible ways: By negotiations between the carriers, or by reference to the Coordinator and an order from him which would adjust the matter (subject, of course, to review by the Commission). In appraising the situation, I do not ask for actual negotiations between the affected carriers over these matters, but for a report indicating the character of the difficulties, and for an expression of opinion upon the part of the committees which have done the investigating as to the likelihood that these difficulties can be overcome, either by negotiations or by action of the Coordinator. The Regional Coordinating Committee can add to the report, if it so desires, its own appraisement of the matter.

I am referring to cases, of course, where actual accomplishment of the economies is prevented for the time being by the labor restrictions in the Act. If these restrictions do not stand in the way, there is no reason why the project should not be carried through to consummation, either by voluntary action of the carriers concerned, or by order of the Coordinator.

I may also say that the mere fact that a project may incidentally involve an abandonment of line is no reason why it should not be studied. I have not referred the subject of abandonment of lines to the Regional Coordinating Committees, preferring to leave the individual carriers free to pursue such abandonments before the Commission under the Interstate Commerce Act. Whatever abandonments are so desired by individual carriers can be followed up in this way, irrespective of the fact that they may also be involved in joint projects which are under consideration by the committees reporting to the Regional Coordinating Committees. The labor restrictions, however, would stand in the way of the immediate accomplishment of the entire joint project.

Federal Coordinator of Transportation

July 17, 1934.

TO THE REGIONAL COORDINATING COMMITTEE:

It will be recalled that on November 20, 1933, I sent a communication to the Coordinating Committee in regard to the extent to which the studies of economies to be realized through unification of terminals, joint use of facilities, pooling of traffic or service, and the like should be carried. To refresh your recollection, a copy of that communication is attached hereto.

Since that communication was sent, these studies, more particularly of unification of terminals, have been carried on to a considerable extent. More satisfactory progress has been made in the West than in the East and South, but quite a little has been or is being done in all three regions. Progress, has, however, been slow, and the two principal reasons for this slowness appear to be these:

1. The present restrictions in the Emergency Act upon reduction in railroad employment have stood in the way of immediate accomplishment, and it is not easy to whip up enthusiasm for a survey which seems to have no present practical object.

2. It appears to be a common feeling among railroad executives that even if there were no restrictions upon reduction in employment, these surveys would still be futile, because of the impracticability, on account of competition and the strategic advantages of certain favored roads under present conditions, of reaching a voluntary agreement on these projects by the carriers concerned, and because the Coordinator would find it impracticable to draft an order which would sufficiently protect property rights and stand the test in the courts.

This being the case I think I should make it clear to you, if I can, why I believe these surveys to be of great importance, from the point of view not only of the public interest but of the interest of the railroad industry, and why they should be vigorously prosecuted.

The first step is to find out what is physically possible in the way of economies in operation. The railroad industry is now in a situation, which in all probability will continue, where no opportunity for economy, however small, can profitably be neglected; but I believe, and the evidence already gathered shows, that the possibilities for economy through terminal unification and the like are very large. Not only is this shown by such surveys as have already been made under the guidance of my staff, but it is demonstrated by what has been done in instances where consolidations or other favorable circumstances have resulted in unification:

The second step is to find out what obstacles stand in the way of what may be physically possible, and whether such obstacles can be removed, and, if so, how. As suggested above, these obstacles are of two kinds:

1. Labor Obstacles. The present restrictions in the Emergency Act are less formidable than they were a year ago, owing to the retirements for various causes which have since taken place and the increase in the total number of employees. They will become less formidable, if and when the new Pension Act becomes practically effective. It is quite possible that as these restrictions now stand, a very considerable measure of the economies can be realized, either now or six months from now. Moreover, these restrictions are temporary. If I am in a position to make public the results of studies which indicate definite possibilities of sizeable and important economies, the shippers and travellers of the country are bound to become interested actively, particularly if they should at the same time be threatened with the possibility of rate increases. The effect will be more pronounced if I can at the same time propose reasonable means of giving labor a just measure of protection, a problem on which my staff is working.

2. Competitive Obstacles. The attitude of individual railroads toward these projects is a serious obstacle. Here is where, as I see it, there is opportunity for railroad statesmanship to make itself felt. Let me bring to your mind one or two points which I deem to be important.

(a) There is reason to believe that these strategic advantages of location and the like are much exaggerated, particularly since the advent of the truck, whether it is operated independently or as an auxiliary of some other railroad. After all, it is now difficult to bind shippers to any particular railroad except through good service and good treatment.

(b) To a very considerable extent these alleged strategic advantages are dependent upon statutory provisions to which the railroads have no constitutional right and of which they can be deprived by legislation. I refer, for example, to the provision against so-called short-hauling. The railroads perform a public function; they were created solely for that purpose and it is their first duty. The public has the right to compel the best service which the rails can provide, whether it involves single-line service or joint service by two or more lines. Individual railroads have no right to require traffic to move over their rails at the expense of the best possible service to the public. Open terminals can be legislated into existence; there is no legal difficulty in the way.

(c) Even more important is the fact that individual railroads cannot under present-day conditions long prosper at the expense of the best interests of the railroad industry as a whole. It is preeminently a time for solidarity and standing together. I believe that you will agree with me, if you will stop to think about it, that this statement is practically axiomatic.

(d) If the best interests of the railroad industry are to be thwarted by individual railroads, the logical conclusion will follow that the number of individual railroads must be radically decreased. This can be done through a "grand plan of consolidation", like the Prince Plan or some substitute therefore, for which proposal there is important support, or it can be done by public ownership and operation.

I am very hopeful that when these and other like considerations are given their due meed of thought, these competitive and strategic obstacles to unification projects which do not involve the elimination of the individual railroads will not loom as large as they have appeared to many executives. However, what I want the executives to do is to put the matter to practical test. There are three large and typical terminal unification projects, one in each region, which are ripe for such a test or soon will be. I refer to the projects at Detroit, Kansas City and Birmingham.

What I propose and request is that the railroads concerned in each one of these projects appoint responsible representatives who will sit down together without delay and endeavor to work out a plan for making the proposed unification effective, just as though there were no labor restrictions and the plan could be carried into effect tomorrow. If such a plan can be worked out, it may, indeed, prove that it can be made effective notwithstanding the labor restrictions and with the protection to labor which they afford.

If it proves that all the lines are unwilling to agree to any plan, then I shall want to know, without delay, what lines prevent an agreement and, definitely and specifically, why they refuse to agree. This will give me an opportunity either to enter the negotiations and try my hand at a settlement or to consider what order might be drafted which would compel the unification and at the same time meet Constitutional requirements.

As indicated in my statement on November 20, 1933, hereto attached, I have been unwilling to put the railroads to the labor and burden of such negotiations in the case of each and every project which is being surveyed. The labor and burden of trying the matter out on these three typical projects, however, will not be unreasonable, and the results ought to afford a fair and good test of what is practicable. In the event of demonstrated impracticability as the law now stands, then, of course, possibilities which may be opened up by further legislation will have to be considered.

Let me make it clear, however, that these practical tests of the ability of the railroads to agree upon unification projects are not intended in any way to interfere with the prosecution of the studies of terminal unification and other coordination projects. It is imperative that this work should be continued and expanded and pushed as rapidly as possible.

Summing up the matter, therefore, I am anxious to obtain in the first place an accurate picture or estimate of the physical possibilities of the situation, and in the second place an accurate appraisal of the practicability of converting these possibilities into actualities. It is my sincere belief, also that this is a matter of very large importance, perhaps, to the individual railroads if they wish their individualities to be preserved. I have in mind, not only terminal unifications, but also all other projects looking toward regional coordination of railroads.

The director of my Section of Regional Coordination, Mr. V. V. Boatner, thoroughly understands what I have in mind in this connection, sympathizes with it, and knows the practical measures which the desired survey of the situation requires. He is working energetically toward this end, and I hope and believe that you will lend him a full and generous measure of support.

Joseph B. Eastman,

Federal Coordinator of Transportation

APPENDIX C

FEDERAL COORDINATOR OF TRANSPORTATION
DIRECTOR REGIONAL COORDINATOR

ESTIMATED SAVINGS - PROJECTS STUDIED.

	ACCOMPLISHED	POSTPONED				
		Section 7(b)	Capital Expend.	Mortgages	Contracts	Total
Western Region						
Savings	$1,486,298	$15,139,541	$197,035	$27,000	$22,500	$16,872,384
Projects	(70)	(403)	(43)	(3)	(13)	(532)
Eastern Region						
Savings	67,596	4,095,346	42,034	-	-	4,766,676
Projects	(15)	(262)	(4)	-	-	(281)
Southern Region						
Savings	-	2,520,423	-	-	-	2,520,423
Projects		(71)				(71)
Total	$1,553,894	$21,755,310	$239,069	$27,000	$22,500	$24,159,483
	(85)	(736)	(47)	(3)	(13)	(884)

AMPLIFICATION BY REGIONAL DIRECTORS	
Western Region	2,462,453
Eastern Region	1,088,769
Southern Region	2,571,253
ITEMS RECEIVED SINCE REPORT PREPARED	
Spokane	275,504
Pooling-Portland-Vancouver-Ellensburg	253,497

ITEMS RECEIVED NOT YET APPROVED BY COORDINATING COMMITTEES

Seattle	$ 155,490	Jt Trk Detroit-Toledo	$115,932	New York	$1,836,644)	
Buffalo	3,244,254	Twin Cities	839,240		)	6,916,655
Cincinnati	67,242	Detroit	657,853		)	

Estimate - Chicago, not yet concluded -	10,000,000
	$47,727,614
Amplifications by Director, details attached.	8,365,734
	$56,093,348

AMPLIFICATIONS BY DIRECTOR DISCUSSED IN REPORT

	Carriers	Regional Director	Director
New Orleans	$378,951	-	$700,000
Louisville	-	$482,189	500,000
Memphis	281,619	435,715	700,000
Chattanooga	104,777	203,916	425,000
Richmond	-	-	250,000
Savannah	-	80,788)	
Charleston	-	101,285)	400,000
Jacksonville	113,900	259,085	450,000
Atlanta	361,675	-	750,000
Birmingham	446,680	-	750,000
Indianapolis	269,328	406,296	550,000
Toledo	42,139	-	1,000,000
Detroit	657,853	-	2,000,000
Toledo-Detroit Jt Trk	115,932	-	450,000
New York	1,836,644	-	5,000,000
Los Angeles	425,178	-	675,000
	$5,034,676		$14,600,000
Additional by Regional Director	$1,199,590		
Additional by Director above Regional Director	8,365,734		
	$14,600,000		

AMPLIFICATIONS BY DIRECTOR DISCUSSED IN REPORT

	Carriers	Regional Director	Director
New Orleans	$378,951	-	$700,000
Louisville	-	$482,189	500,000
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Richmond	-	-	250,000
Savannah	-	80,788)	
Charleston	-	101,285)	400,000
Jacksonville	113,900	259,085	450,000
Atlanta	361,675	-	750,000
Birmingham	446,680	-	750,000
Indianapolis	269,328	406,296	550,000
Toledo	42,139	-	1,000,000
Detroit	657,853	-	2,000,000
Toledo-Detroit Jt Trk	115,932	-	450,000
New York	1,836,644	-	5,000,000
Los Angeles	425,178	-	675,000
	$5,034,676		$14,600,000
Additional by Regional Director	$1,199,590		
Additional by Director above Regional Director	8,365,734		
	$14,600,000		

FEDERAL COORDINATOR OF TRANSPORTATION
DIRECTOR REGIONAL COORDINATION

COORDINATION PROJECTS DROPPED

	Prevented By Laws	Prohibitive Cap. Expend.	Mort-gages	Loss Comp. Advantages	Lack Merit	Not Class-ified	Total
Western Region	3	29	5	31	1,095	93	1,256
Eastern Region	-	-	-	-	114	2,227	2,341
Southern Region	-	-	-	1	442	-	443
Total	3	29	5	32	1,651	2,320	4,040

APPENDIX D

WESTERN REGION

STUDIES OF PROPOSED COORDINATION PROJECTS PENDING

Celilo Jct. to North Jct., Oregon	Joint use by OWR&N Co. of SP&S line and abandonment of 71.3 miles of OWR&N branch line between Ainsworth, Oregon, and North Junction, Oregon.
Chehalis-Dryad, Wash.	Abandonment of approximately 18 miles of CMStP&P branch line between Chehalis Junction and Dryad, and joint use of NP branch line between those points.
Chicago, Ill.	Unification of terminals.
Fresno, Calif.	Operation of Fresno Interurban branch of AT&SF by either the Santa Fe or the UP.
Longview, Washington	Abandonment of jointly-owned LP&N line between Longview and Vader Junction. (NP-GN-OWR&N-CMStP&P).
Oakland, Calif. (Including Richmond)	Unification of terminals. (SP-AT&SF-UP).
Seattle, Wash.	Unification of terminals. (NP-GN-CMStP&P-OWR&N).
Twin Cities (St. Paul-Minneapolis)	Unification of terminals.

EASTERN REGION

STUDIES OF PROPOSED COORDINATION PROJECTS PENDING

Attica-Batavia, N. Y.	Coordination of competitive freight train operations, Erie-NYC.
Baltimore, Md.	Unification of terminals.
Bellevue, Ohio	Coordination of all railroad facilities.
Binghamton, N. Y.	Coordination of DL&W and Erie enginehouse facilities.
Boston, Mass.	Unification of terminals.
Buffalo, N. Y.	Unification of terminals.
Car Ferries on Lake Michigan	Coordination of these facilities.
Cass City-Bad Axe, Mich.	Coordination of GTW and PM lines.
Cincinnati, Ohio	Unification of terminals.
Cleveland, Ohio	Unification of terminals.
Coal Tows from Perth Amboy to Newark Bay Points	Coordination of these facilities.
Cumberland, Md.	Unification of terminals.
Delphos, Ohio	Unification of terminals.
Detroit, Mich.	Unification of terminals.
Eastern Pennsylvania District	Coordination of Reading and Pennsylvania facilities and services.
Eccles, W. Va.	Coordination of shifting at coal mines by C&O and Virginian.
Elmira, N. Y.	Unification of terminals.
Erie, Pa.	Unification of terminals.
Hagerstown, Md.	Unification of terminals.
Hammond-North Judson, Ind.	Coordination of Erie and C&O lines.
Indianapolis, Ind.	Unification of terminals.
Lansing, Mich.	Unification of terminals.
Lima, Ohio	Unification of terminals.
Mansfield, Ohio	Unification of terminals.

New York, N. Y.	Unification of terminals.
New York-Montreal	Coordination of competitive passenger train operations, NYNH&H-D&H-NYC-Rutland-B&M-Cent.Vt.-Can.Natl-CPR-Penna.
New York-Point Pleasant, N. J.	Coordination of competitive passenger train operations, Penna.-Jersey Central.
New York-Washington-Washington West	Coordination of competitive passenger train operations, B&O-Penna.
Norfolk-Portsmouth, Va.	Unification of terminals.
Piney River-Paint Creek-Pemberton-Deepwater, Va.	Coordination of competitive freight train operations, C&O-Virginian.
Philadelphia, Pa.	Unification of terminals.
Pittsburgh, Pa.	Unification of terminals.
Pittsburgh-Erie-Buffalo-Pittsburgh-Cleveland-Detroit	Coordination of competitive passenger train operations, NYC-Erie-Penna.-B&O.
Pocahontas Coal Fields of Virginia and West Virginia	Coordination of facilities and joint mine switching of C&O, N&W and Virginian.
Potomac Yard-Boston	Coordination of competitive freight train operations, B&O-Penna.-NYNH&H-B&M-Reading-D&H-B&A-West Shore-Jersey Central.
Rochester, N. Y.	Unification of terminals.
Scranton, Pa.	Unification of terminals.
South Bend, Ind.	Unification of terminals.
Toledo, Ohio-Detroit, Mich.	Coordination and joint use of tracks of the railroads operating between these points.
Washington, D. C.	Unification of terminals.
Wilkes Barre, Pa.	Unification of terminals.
Wilkes Barre-Scranton District to New York Area	Movement of eastbound coal.
Wilmington, Del.	Unification of terminals.
York, Pa.	Unification of terminals.

SOUTHERN REGION

STUDIES OF PROPOSED COORDINATION PROJECTS PENDING

Norfolk, Va.	Unification of terminals.
Richmond, Va.	Unification of terminals.

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